IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

NATIONAL STEEL CAR LIMITED, Plaintiff/Counterclaim-Defendant, v. FREIGHTCAR AMERICA, INC., FREIGHTCAR NORTH AMERICA, LLC, JAC OPERATIONS, INC., AND FCA-FASEMEX, LLC, Defendant/Counterclaim-Plaintiffs.	)	**Redacted - Public Version** C.A. No. 24-594-JLH-CJB [redacted]

LETTER TO THE HONORABLE CHRISTOPHER J. BURKE REGARDING PLAINTIFF'S OPPOSITION TO DEFENDANTS' MOTION FOR LEAVE TO AMEND THEIR ANSWER TO THE SECOND AMENDED COMPLAINT AND COUNTERCLAIMS (DI 121)

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September 26, 2025

VIA CM/ECF & HAND DELIVERY
The Honorable Christopher J. Burke
J. Caleb Boggs Federal Building
844 N. King Street, Unit 28, Room 2325
Wilmington, DE 19801-3555

[redacted]

RE: *National Steel Car Limited v. FreightCar America, Inc.*, Civ. No. 24-00594

Dear Judge Burke:

National Steel Car Limited ("NSC") respectfully opposes Defendants' Motion for Leave to Amend their Answer to the Second Amended Complaint and Counterclaims (the "Motion," D.I. 121, briefed at D.I. 122, the "Proposed Amendments," D.I. 122, Ex. A). The Court should deny the Motion due to Defendants' undue delay in filing and the futility of the amendment.

LEGAL STANDARD

Federal Rule of Civil Procedure 15(a)(2) allows for amendments apart from those as a matter of course "only with the opposing party's written consent or the court's leave." Fed. R. Civ. P. 15(a)(2). A request under Rule 15(a) should be denied when it is filed after undue delay or if the amendment would be futile. *See SRI Int'l Inc. v. Internet Sec. Sys., Inc.*, 817 F. Supp. 2d 418, 422 (D. Del. 2011). An amendment is futile if it "would fail to state a claim upon which relief could be granted." *In re Burlington Coat Factory Sec. Litig.*, 114 F.3d 1410, 1434 (3d Cir. 1997).

A request to amend a pleading after the court's deadline must also meet the "good cause" standard of Rule 16(b)(4) "before a district court considers whether the party also meets Rule 15(a)'s more liberal standard." *Premier Comp Sols. v. UP MC,* 970 F .3d 316, 319 (3d Cir. 2020). Rule 16(b)(4) provides, "A schedule may be modified ***only*** for good cause and with the judge's consent." Fed. R. Civ. P. 16(b)(4) (emphasis added). This standard focuses on the "***diligence of the movant***, and not on prejudice to the non-moving party." *Roquette Freres v. SPI Pharma, Inc.,* No. 06-cv-00540, 2009 WL 1444835, at *4 (D. Del. May 21, 2009) (emphasis added).

DEFENDANTS ACTED WITH UNDUE DELAY IN SEEKING TO AMEND.

The deadline to amend pleadings was March 27, 2025. D.I. 38, ¶ 2. Defendants have known of the 1946 Cyclopedia since well-before, but at least by, April 10, 2025, when they served their invalidity contentions, including their analysis of the 1946 Cyclopedia vis-à-vis the Asserted Patents. *See* Exhibit A; D.I. 63. On July 18, 2025, Defendants told NSC that they intended to amend their pleadings to include an inequitable conduct counterclaim regarding the 1946 Cyclopedia. *See* Exhibit C to D.I. 122. Defendants inexplicably waited until September 19, 2025, to request permission to amend. *See* D.I. 121.

A delay of two months—let alone five months—falls well short of the diligence required to satisfy Rule 16(b)(4). *See Barry v. Stryker Corp.*, No. CV 20-1787-RGA, 2022 WL 16948625, at *3 (D. Del. Nov. 15, 2022) (noting that defendants lack of explanation for a ***50-day*** delay between when they "appear to have been able to have brought the claim of inequitable conduct"

and actually filing the amendment "undermine[d] their argument of diligence"); *see also Genentech, Inc. v. Amgen Inc.*, No. 16-cv-1407-CFC, 2020 WL 708113, at *1 (D. Del. Feb. 12, 2020) (finding the movant failed to show good cause when it had the ability to plead an inequitable conduct claim ***two months*** before it filed its motion and did not provide an explanation for the delay).

Defendants have not demonstrated that any newly discovered facts justify their substantial delay. Their reliance on NSC's July 25, 2025 production to claim that this is the first time they learned the inventors "regularly consulted the Cyclopedias" is plainly incorrect. *See* D.I. 122 at 1. [redacted] *See* Exhibits B-F. These materials clearly establish that FreightCar had access to the core facts underlying its motion for at least ***seven months***. The record leaves no room for doubt: Defendants cannot credibly claim that their delay was driven by late discovery.

Defendants cannot claim diligence based on these facts. In *Cordance Corp. v. Amazon.com, Inc.*, 255 F.R.D. 366, 372 (D. Del. 2009), the moving parties discovered the relevant facts during depositions in November 2008 and filed its motion to amend ***less than one month later***, on December 1, 2008. In contrast, Defendants here offer no authority to justify their ***delay of at least five-months***. Their failure to act with comparable urgency underscores the absence of diligence required under Rule 16(b)(4).

THE PROPOSED AMENDMENTS ARE FUTILE.

An amendment is futile if it fails to state a claim upon which relief could be granted. *See In re Burlington Coat Factory Sec. Litig.,* 114 F.3d 1410, 1434 (3d Cir. 1997). The futility analysis mirrors the standard applied under Rule 12(b)(6), requiring the proposed claim to be legally sufficient on its face. *Id.*

To plead inequitable conduct, the accused infringer must meet a demanding standard: (1) a specific individual must have acted with the specific intent to deceive the PTO, and (2) the withheld or misrepresented information must be material. *See Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1290 (Fed. Cir. 2011) (en banc). Crucially, the materiality element requires a show of "but-for" materiality—meaning the PTO would not have allowed the claim had it been aware of the undisclosed prior art. *Id*. at 1291. Defendants' proposed amendment fails to meet this rigorous standard and therefore cannot survive a futility analysis.

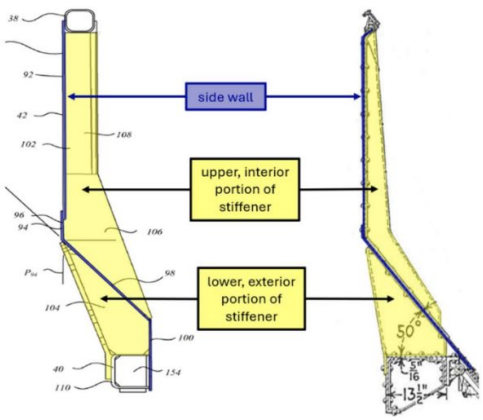
The Proposed Amendments Fail to Allege Materiality.

The Proposed Amendments are deficient and therefore futile because they fail to address the contents of the prior art that was before the PTO. Such a failure means that Defendants have failed to plead materiality, period. *See Analog Devices, Inc. v. Xilinx, Inc.*, No. 2019-cv-02225-RGA, 2021 WL 466859, at *2-*4 (D. Del. Feb. 9, 2021) (dismissing inequitable conduct defense for failing to plead the non-cumulativeness of the prior art, and thus, materiality).

Defendants fail to allege that the allegedly withheld art, a 1946 Cyclopedia, fills a gap that the art considered during prosecution left open. At best, Defendants' claim that "Forbes, Thiesen, and Keats knew the Claimed Sidewall Stiffener was … unpatentable … because they knew NSC had prior-art railcars that … embodied all the limitations of at least Claim 1." Proposed Amendments ¶45. Critically, while Defendants claim that the "NSC 50-ton center discharge ore

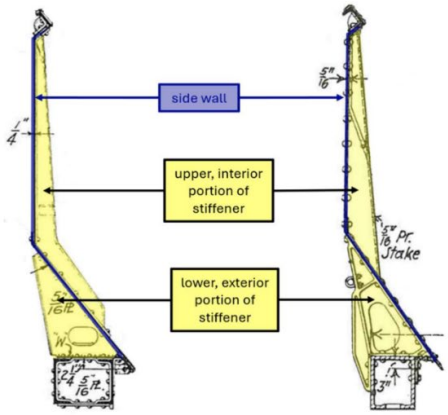
cars" teach each and every element of at least one claim (*see id*. at ¶45), Defendants do not allege that the NSC 50-ton ore car is non-cumulative to other art considered by the USPTO.

Defendants cannot plausibly argue that the 1946 Cyclopedia discloses a noncumulative design. During prosecution, NSC disclosed and the PTO considered prior art featuring numerous rail car designs, many of which include the very same design features found in the 1946 Cyclopedia. Indeed, Defendants themselves identified three such cars in their *Inter Partes* Review Petitions as examples of the allegedly "commonplace" use of side-wall stiffeners: one attributed to NSC, one to Enterprise, and one to Pressed Steel. *See* Petition for *Inter Partes Review* of U.S. Patent No. 8,132,515 (the "IPR Petition," attached as **Exhibit 1** to the Proposed Amendments) at 13-14. These references are not new, nor are they materially distinct from what the PTO already considered. Defendants' own comparative figure underscores the redundancy.



'892 Patent Figure 2c

1946 Cyclopedia NSC Car

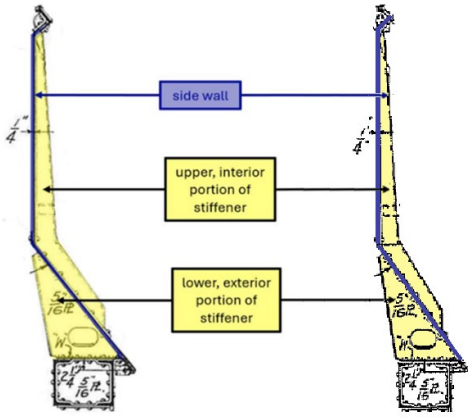


1946 Cyclopedia Enterprise Car

1946 Cyclopedia Pressed Steel Car

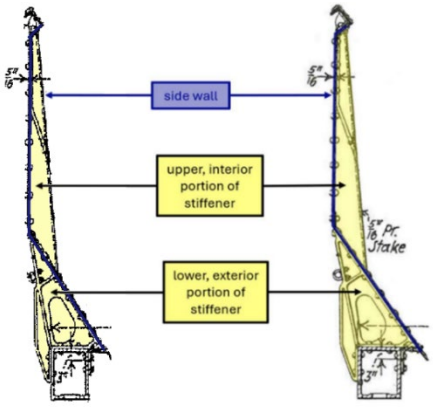
IPR Petition at 14. In short, the 1946 Cyclopedia adds nothing of substance to the prior art already before the PTO and cannot support a claim of non-cumulativeness.

For example, the identical Enterprise and Pressed Steel cars were disclosed in the 1943 Cyclopedia that NSC provided to, and were considered by, the PTO. *See* Ex. G-I. The images below (on the left), which are substantially the same, illustrate that the Enterprise car in the 1946 Cyclopedia is ***identical*** to that in the 1943 Cyclopedia; and, the images below (on the right), which are substantially the same, illustrate the Enterprise car in the 1943 Cyclopedia and the Pressed



1946 Cyclopedia Enterprise Car

1943 Cyclopedia Enterprise Car



1943 Cyclopedia Pressed Steel Car

1946 Cyclopedia Pressed Steel Car

Steel car in the 1946 Cyclopedia are the same. IPR Petition at 14; Ex. I (images highlighted and modified to show portions identified by Defendants and to adjust ratios of images).

Defendants' own written admissions confirm that the 1946 Cyclopedia's disclosure of the NSC ore car is substantially the same as the disclosures of the Enterprise and Pressed Steel cars. Critically, those disclosures are identical to the 1943 Cyclopedia drawings of the same, which were expressly considered by the Examiner during prosecution. Each of these schematics teaches the same, or at minimum substantially the same, features, including L-brackets bolted or riveted to the hopper wall. Given this clear overlap, Defendants cannot credibly argue that the 1946 Cyclopedia is not cumulative of the 1943 Cyclopedia. Defendants fail to establish the "but-for" materiality required to plead inequitable conduct under *Therasense*. Without materiality, their claim should not proceed.

The Proposed Amendments Do Not Meet the Inequitable Conduct Pleading Standard.

Allegations of inequitable conduct must be pled with particularity. *Exergen Corp. v. Wal-Mart Stores, Inc.*, 575 F.3d 1312, 1328 (Fed. Cir. 2009); *see also Wyeth Holdings Corp. v. Sandoz, Inc.*, No. 09-cv-955-LPS-CJB, 2012 WL 600715, at *5 (D. Del. Feb. 3, 2012) (Burke, J.) ("Although inequitable conduct is conceptually broader than fraud, any such allegations must be pled in accordance with Rule 9(b), which requires that 'the circumstances constituting fraud or mistake shall be stated with particularity."). This means "the pleading must identify the specific who, what, when, where, and how of the material misrepresentation or omission committed before the PTO." *Exergen*, 575 F.3d at 1328-29. Specifically, it must name an individual who "(1) knew of the withheld material information or of the falsity of the material misrepresentation, and (2) withheld or misrepresented this information with a specific intent to deceive the PTO." *Id.* To satisfy the intent prong, the pleading must include facts "from which the Court could *reasonably infer* that the patent applicant made a deliberate decision to deceive the PTO." *Wyeth Holdings,* 2012 WL 600715 at *7 (emphasis in original).

Defendants' Proposed Amendments fail to plead the essential elements of inequitable conduct—**knowledge and intent**—rendering the claim futile. There are no allegations that Forbes, Thiesen, or Keats had specific knowledge of the 1946 Cyclopedia. Instead, Defendants rely on vague assertions that these individuals were aware of "versions" or "prior" editions of the Car Builders' Cyclopedia." *See* Proposed Amendments ¶¶53-54. Such generalized allegations fall far short of the particularity required under Rule 9(b). As the Federal Circuit made clear in *Exergen*, 575 F.3d at 1330, mere general awareness of prior art is insufficient without facts showing knowledge of specific and material information contained in the withheld prior art references.

Defendants also try to infer knowledge based on that "NSC is listed as an advertiser in the 1946 Cyclopedia's Advertiser Index." *See* Proposed Amendments ¶48. This inference is both speculative and legally insufficient, especially given that the advertisement was more than 60 years before the patents at issue. Again, *Exergen* is instructive: references to a corporate entity, rather than a specific individual, do not satisfy the "who" requirement under Rule 9(b). *Exergen*, 575 F.3d at 1329.

Regarding the intent element, Defendants' failure to identify a specific individual with knowledge of the 1946 Cyclopedia "is fatal to [their] efforts to plead the requisite scienter." *See LEO Pharma A/S v. Actavis Labs. UT, Inc.*, No. 16-cv-333-JFB-SRF, 2018 WL 1045816, at *6 (D. Del. Feb. 26, 2018) (citing *Exergen*, 575 F3d at 1330). The absence of such an allegation

precludes a finding of the specific intent to deceive required to plead inequitable conduct. Without naming a person who both knew of the reference and deliberately withheld it. Defendants cannot meet the heightened pleading standard for scienter.

Courts have repeatedly cautioned against allowing inequitable conduct claims to proceed based on vague or conclusory allegations. As the Federal Circuit warned in *FMC Corp. v. Manitowoc Co.*, 835 F.2d 1411, 1415 (Fed. Cir. 1987), permitting such claims without particularized facts risks turning inequitable conduct into a "magic incantation" asserted reflexively against every patentee, based solely on the nondisclosure of arguably material information. Here, Defendants plead no facts—none—that support an inference of deceptive intent. This omission is not a mere technicality; it is a fundamental failure. As the Court recently held in *Equil IP Holdings LLC v. Akamai Technologies, Inc.*, 722 F.Supp.3d 450 at 456-7 (D. Del 2024), a party fails to plead inequitable conduct with particularity when it "fails to plead any facts suggesting that [inventor] intended to deceive the PTO."

CONCLUSION

Denying Defendants' Motion to Amend, whether due to their undue delay or the futility of the Proposed Amendments, does not prejudice them. They remain free to pursue their invalidity arguments based on the 1946 Cyclopedia through their existing obviousness defense. What they should not be entitled to do, however, is advance a claim of inequitable conduct based on threadbare and conclusory assertions of deceptive intent. Such serious accusations must be scrutinized with particular care. As the Third Circuit emphasized in *Burlington Coat Factory Sec. Litig.*, 114 F.3d 1410, 1418 (3d Cir. 1997) (Alito, J.), Rule 9(b) exists to prevent precisely this kind of speculative and reputationally damaging litigation: "To allow plaintiffs and their attorneys to subject companies to wasteful litigation based on the detection of a few negligently made errors … would be contrary to the goals of Rule 9(b)." That principle applies with equal force here.

Respectfully submitted,

/s/ Andrew E. Russell

Andrew E. Russell (No. 5382)

cc: Clerk of Court (by CM/ECF & Hand Delivery)
All Counsel of Record (by CM/ECF & Email)

EXHIBIT A

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

NATIONAL STEEL CAR LIMITED, Plaintiff, v. FREIGHTCAR AMERICA, INC., FREIGHTCAR NORTH AMERICA, LLC, JAC OPERATIONS INC., and FCA-FASEMEX, LLC Defendant.	C.A. No 1:24-cv-00594-JLH-CJB

FREIGHTCAR AMERICA, INC.'S
INITIAL INVALIDITY CONTENTIONS

Pursuant to Paragraph 4(d) of the Delaware Default Standard for Discovery, Including Discovery of Electronically Stored Information ("ESI") (the "Default Standard") and Paragraph 6(e) of the Scheduling Order (D.I. 38) entered in the above-captioned action, Defendant/Counterclaimant FreightCar America, Inc. ("FreightCar America") hereby provides the following Initial Invalidity Contentions to Plaintiff/Counterdefendant National Steel Car Limited ("Plaintiff" or "NSC") with respect to the claims of U.S. Patent Nos. 8,132,515 ("the '515 patent") and 8,166,892 ("the '892 patent") (together with any additional patent Plaintiff may asserts in this case, the "asserted patents"). FreightCar America is contemporaneously producing with this submission the references required under Paragraph 4(d) of the Default Standard.

I. GENERAL STATEMENTS

FreightCar America contends that all claims asserted against it are invalid under at least 35 U.S.C. §§ 102, 103, and/or 112 as described herein. FreightCar America provides exemplary prior-art citations and statements explaining the invalidity of the asserted claims in the following disclosure and claim charts, which are incorporated herein by reference. FreightCar America also provides exemplary combinations of prior art and the motivation to combine such references for purposes of FreightCar America's obviousness defenses. FreightCar America's invalidity positions in these contentions may be in the alternative and do not constitute any concession or admission by FreightCar America for purposes of invalidity, enforceability, claim construction, and/or infringement. *See, e.g., Vanmoor v. Wal-Mart Stores, Inc.*, 201 F.3d 1363, 1366 (Fed. Cir. 2000); *Water Techs. Corp. v. Calco, Ltd.*, 850 F.2d 660, 665 (Fed. Cir. 1988).

FreightCar America reserves the right to rely on any combination or combinations of the prior art references cited or discussed in these disclosures and the development of additional arguments regarding motivation to combine and expectations of success as fact and expert discovery proceed. FreightCar America also reserves the right to rely on any prior art cited or

discussed in the prosecution histories of the '515 and '892 patents as well as any related patents and applications, and any prior art produced by Plaintiff in this action, as a basis for contending that the claims are invalid. FreightCar America further identifies as prior art upon which it may rely all statements in the specifications of the '515 and '892 patents admitted as being prior art to the claims of the '515 or '892 patents, as well as those references identified during prosecution of the '515 and '892 patents.

A. Claim Construction

Plaintiff has not yet provided its claim construction positions, and the Court has not yet construed the Asserted Claims. The claims of the asserted patents are invalid under any reasonable construction. FreightCar America reserves all rights to further supplement or modify the positions and information in these Initial Invalidity Contentions, including without limitation, the prior art and grounds of invalidity set forth herein regarding any claim at issue in this litigation, after the Court has construed any claim and to the full extent consistent with the Federal Rules of Civil Procedure, the Local Rules, the Default Standard, and any other applicable rule or order.

B. Ongoing Discovery

These Initial Invalidity Contentions are necessarily preliminary and may require subsequent amendment, alteration, or supplementation. Discovery in this case is in its early stages and FreightCar America's investigation, including its search for prior art, is ongoing. FreightCar America reserves the right to supplement or alter the positions taken and information disclosed in these Initial Invalidity Contentions including, without limitation, the prior art and grounds of invalidity set forth herein concerning any asserted claim and/or patent, to take into account information or defenses that may come to light as a result of these continuing efforts. FreightCar America reserves the right to supplement or amend these Initial Invalidity Contentions to the full extent consistent with the Federal Rules of Civil Procedure, the Local Rules, the Default Standard,

and any other applicable rule or order as additional information becomes available through discovery or otherwise.

Finally, the information set forth below is provided without in any manner waiving: (1) the right to object to the use of any information or document for any purpose, in this action or any other actions, on the grounds of privilege, relevance, materiality, or any other appropriate grounds; (2) the right to object to any request involving or relating to the subject matter of the statements herein; or (3) the right to revise, correct, supplement or clarify any of the statements provided below at any time.

II. IDENTIFICATION OF PRIOR ART

It should be recognized that a person of ordinary skill in the art ("POSA" or "POSITA") would generally read a prior art reference as a whole and in the context of other publications, literature, and general knowledge in the field. To understand and interpret any specific statement or disclosure in a prior art reference, a POSA would rely upon other information including other publications and general knowledge relevant to the subject matter of the '515 and/or '892 patents. FreightCar America therefore reserves the right to rely upon other unidentified portions of the prior art references, other publications, other relevant knowledge and expert testimony to provide context and to aid understanding and interpretation of any identified portions. FreightCar America also reserves the right to rely upon other portions of the prior art references, other publications, and the testimony of experts to establish that the alleged inventions were inherently disclosed in the prior art and/or would have been obvious to a POSA, including based on modifying or combining certain cited references.

FreightCar America hereby incorporates by reference any rejections made by the Patent and Trademark Office ("PTO") during the prosecution of the applications leading to any asserted claim. FreightCar America reserves the right to assert any art cited in the prosecution histories of

any asserted patent as a basis for contending that any claim at issue in this litigation is invalid. FreightCar America further identifies as prior art upon which it may rely those references identified in Information Disclosure Statements during the prosecution of any asserted patent. FreightCar America also reserves the right to rely upon any admissions relating to prior art in any asserted patent or its prosecution history and those of related applications, such as those included in any priority claim or those that claim priority to an asserted patent. In addition, FreightCar America reserves the right to rely on any and all prior art and any and all evidence of the relevant state of the art produced by Plaintiff. FreightCar America incorporates in their entirety the proceedings in any *inter partes* reviews or other post-grant proceedings regarding an asserted patent ("PTAB proceedings"), including the petitions, expert declarations, and all other evidence and arguments submitted in each case.

FreightCar America further incorporates by reference, in full, all references cited in the following prior art references and their prosecution histories, where applicable. The citations provided are representative of the references and are not exhaustive. To the extent similar claim limitations occur in one or more claims, the disclosure below should be read to apply to all similar claim limitations. Moreover, many of the references discussed herein are representative of additional prior art references in the relevant field. Thus, it should also be recognized that the various concepts may be discussed in numerous references and that citation to one particular reference does not exclude later citation to other references discussing the same concept.

FreightCar America reserves the right to rely upon any related patents and patent applications, foreign patent counterparts and foreign patent applications of U.S. patents or applications identified in these Initial Invalidity Contentions, U.S. and foreign counterparts of foreign patents or foreign patent applications identified in these Initial Invalidity Contentions, or

U.S. and foreign patents or applications corresponding to articles and publications identified in these Initial Invalidity Contentions. For prior art patents and publications identified in these Initial Invalidity Contentions, FreightCar America reserves the right to rely on inherency, public use, offer for sale, and/or sale of the products described in those prior art patents or publications.

Subject to the above, FreightCar America identifies the following prior art references now known to it that anticipates at least one of the asserted claims under pre-AIA 35 U.S.C. §§ 102(a), (b), (e), and/or (g) and/or renders obvious at least one of the asserted claims under 35 U.S.C. § 103. The following patents, publications, and systems are prior art under at least pre-AIA 35 U.S.C. §§ 102(a), (b), (e), and/or (g). Defendants identify these references in addition to all the prior-art references appearing on the face of the Asserted Patents or in their file histories. Defendants may also rely on any of the identified references below to establish the state of the art and/or what was within the knowledge of a person of ordinary skill in the art.

A. Definitions

These Contentions, including Appendix A and Appendix B, may use the following definitions.

Term	Definition
Bethlehem Steel B.C.I.M. Ore Car (1954)	The physical 50 Ton Ore Car(s) that Bethlehem Steel produced corresponding to at least drawing nos. E-37211 and E-37224 and order no. DF-201.
1955 Bethlehem Steel I.C.O.M.I. Ore Car (1955)	The physical 70 Ton Ore Car(s) that Bethlehem Steel produced corresponding to at least drawing no. E-38399 and order no. DF-216.
1965 Bethlehem Steel I.C.O.M.I. Ore Car (1965)	The physical 70 Ton Ore Car(s) that Bethlehem Steel produced corresponding to at least drawing no. E-37355 and order nos. 204, 3400-415, 3400-250.

Term	Definition
Bethlehem Steel L.S.&I. Ore Car (1965)	The physical 85 Ton Ore Car(s) that Bethlehem Steel produced corresponding to at least drawing no. E-46070 and order no. 3400-444.
1909 Cyclopedia	The 1909 Car Builders' Dictionary
1912 Cyclopedia	The 1912 Car Builders' Dictionary
1922 Cyclopedia	The 1922 Car Builders' Cyclopedia
1940 Cyclopedia	The 1940 Car Builders' Cyclopedia
1946 Cyclopedia	The 1946 Car Builders' Cyclopedia
1953 Cyclopedia	The 1953 Car Builders' Cyclopedia
Enterprise 75-Ton Ore Car	The physical railcar(s) and publication(s) thereof shown at 1946 Cyclopedia Figs. 2.668 and 2.682 and 1953 Cyclopedia pages 238-39.
Pressed Steel DM&IR Ore Car	The physical railcar(s) and publication(s) thereof shown at 1946 Cyclopedia Figs. 2.665 and 2.667 and 1953 Cyclopedia page 240.
Cambria Steel Ore Car	The physical railcar(s) and publication(s) thereof shown at 1909 Car Builders' Dictionary Figs. 69 on page 19.
NSC 50-Ton Ore Car	The physical railcar(s) and publication(s) thereof shown at 1946 Cyclopedia Figs. 2.670 & 2.673 on pages 294 & 295.
M&SP Ore Car	The physical railcar(s) and publication(s) thereof shown at 1906 Car Builders' Dictionary Figs. 430-434 on page 118.
Kilbourne & Jacobs Hopper Car	The physical railcar(s) and publication(s) thereof shown at 1912 Car Builders' Dictionary Fig. 24 on page 208.
Gregg Co. Hopper Car	The physical railcar(s) and publication(s) thereof shown at 1922 Car Builders' Cyclopedia Fig. 2904 on page 1113.
Enterprise 75-Ton Ore Car	The physical railcar(s) and publication(s) thereof shown at 1946 Cyclopedia Figs. 2.668 and 2.682 and 1953 Cyclopedia pages 238-39.
Lindstrom I Patent (1915)	U.S. 1,124,479
Lindstrom II Patent (1919)	U.S. 1,321,928
Lindstrom III Patent (1911)	U.S. 1,002,856
Gilpin Patent (1934)	U.S. 2,030,748
Hart Patent (1911)	U.S. 992,192
Beaver Patent (1967)	U.S. 3,315616
Campbell Patent (1935)	U.S. 1,999,652
Charles Patent (1966)	U.S. 3,240,168
Coulborn Patent (1989)	U.S. 4,875,417
Fischer Patent (1986)	U.S. 4,601,244

Term	Definition
King Patent (1904)	U.S. 774,967
Schuller Patent (1973)	U.S. 3,710,729
Stark Patent (1971)	U.S. 3,605,635
Summa Patent (1913)	U.S. 1,066,544
Sutter Patent (1970)	U.S. 3,509,827
Wong Patent (1990)	U.S. 4,941,411
BP Chemicals Hopper Car	The physical railcar(s) and publication(s) thereof shown at Working Wagons A Pictorial Review of Freight Stock on the B.R. System Volume 3. 1980-1984 page 62.
Tarmac PGA Stone Wagon	The physical railcar(s) and publication(s) thereof shown in Tarmac PGA Stone Wagons.
British Steel Hopper Car	The physical railcar(s) and publication(s) thereof shown at Private Owner Wagons in Colour For the Modeller and Historian on page 27.
L&Y Wagon	The physical railcar(s) and publication(s) thereof shown at Lancashire & Yorkshire Wagons Volume Two on the cover.
BR Shildon Hopper Car	The physical railcar(s) and publication(s) thereof shown at Wagons of the Final Years of British Railways A Pictorial Study of the 1962-1968 Period on page 39.
Marcroft Hopper Car (1993)	The physical railcar(s) and publication(s) thereof shown at Wagon Recognition on page 55.
Hart Patent (1911)	U.S. 992,192
Tomlinson Iron Ore Wagon	The physical railcar(s) and publication(s) thereof showing railcars of the type of bottom discharge Tomlinson Steel WA built ore wagons, available at the URL in the footnote.[1]
Steetley Hopper Car	The physical railcar(s) and publication(s) thereof shown at Private Owner Wagons (Volume 1) on page 27.
Comeng Mineral Hopper Wagon	The physical railcar(s) and publication(s) thereof shown at RT Railway Transportation February 1967.

B. Prior Art Patents and Published Patent Applications

Patent / Publication No.	Country / Jurisdiction	Issue / Publication Date
3,315,616	U.S.	4/25/1967

[1] https://pilbararailways.com.au/gallery/displayimage.php?album=224&pid=14630#top_display_media

Patent / Publication No.	Country / Jurisdiction	Issue / Publication Date
1,999,652	U.S.	4/30/1935
3,240,168	U.S.	3/15/1966
4,875,417	U.S.	10/24/1989
4,601,244	U.S.	7/22/1986
2,030,748	U.S.	2/11/1936
992,192	U.S.	5/16/1911
774,967	U.S.	11/15/1904
1,124,479	U.S.	1/12/1915
1,002,856	U.S.	9/12/1911
1,321,928	U.S.	11/18/1919
3,710,729	U.S.	1/16/1973
3,605,635	U.S.	9/20/1971
1,066,544	U.S.	7/8/1913
3,509,827	U.S.	5/5/1970
4,941,411	U.S.	7/17/1990

C. Prior Art Publications

Title	Publication Date	Author / Editor	Publisher
The Master Car Builders' Association Car Builders' Dictionary 1906 Edition	1906	Rodney Hitt	The Railroad Gazette
The Master Car Builders' Association Car Builders' Dictionary 1909 Edition	1909	Francis E. Lister	The Railway Age Gazette
Car Builders' Dictionary Seventh Edition	1912	Roy V. Wright	Simmons-Boardman Publishing Company
Car Builders' Cyclopedia of American Practice Tenth Edition	1922	Roy V. Wright	Simmons-Boardman Publishing Company
Car Builders' Cyclopedia of American Practice Fifteenth Edition	1940	Roy V. Wright	Simmons-Boardman Publishing Corporation

Title	Publication Date	Author / Editor	Publisher
1946 Car Builders' Cyclopedia of American Practice	1946	Roy V. Wright	Simmons-Boardman Publishing Corporation
1953 Car Builders' Cyclopedia of American Practice	1953	C. B. Peck	Simmons-Boardman Publishing Corporation
1966 Car and Locomotive Cyclopedia of American Practice	1966	C. L. Combes	Simmons-Boardman Publishing Corporation
The Car and Locomotive Cyclopedia of American Practices Sixth Edition	1997	William W. Kratville	Simmons-Boardman Books, Inc.
Coal Cars The First Three Hundred Years	2007	Martin Robert Karig III	University of Scranton Press
Lancashire & Yorkshire Wagons Volume Two	2006	Noel Coates	Wild Swan Publications Ltd.
Tarmac PGA Stone Wagons	2006	P. R. Harrison	N/A [web page]
Wagons of the Final Years of British Railways A Pictorial Study of the 1962-1968 Period	2008	David Larkin	Kestrel Railway Books
Private Owner Wagons (Volume 1)	1989	Andrew Marshall	Metro Enterprises Ltd.
Working Wagons A Pictorial Review of Freight Stock on the B.R. System Volume 3. 1980-1984	2001	David Larkin	Santona Publications
Private Owner Wagons in Colour For the Modeller and Historian	2009	David Ratcliffe	Ian Allan Publishing
RT Railway Transportation	February, 1967	N/A	N/A
Wagon Recognition	2008	Martin Buck & Mark Rawlinson	Freightmaster Publishing

FreightCar America additionally identifies and relies on each of the additional patent or publication references that describe or are otherwise related to the prior art systems identified herein.

D. Physical Prior Art

Prior Art System	Date of Offer for Sale / Information Became Known
Enterprise 75-Ton Ore Car	1946 or earlier
Pressed Steel DM&IR Ore Car	1946 or earlier
Cambria Steel Ore Car	1909 or earlier
NSC 50-Ton Ore Car	1946 or earlier
Bethlehem Steel B.C.I.M. Ore Car (1954)	1954 or earlier
1955 Bethlehem Steel I.C.O.M.I. Ore Car (1955)	1955 or earlier
1965 Bethlehem Steel I.C.O.M.I. Ore Car (1965)	1965 or earlier
Bethlehem Steel L.S.&I. Ore Car (1965)	1965 or earlier
M&SP Ore Car	1906 or earlier
Kilbourne & Jacobs Hopper Car	1912 or earlier
Gregg Co. Hopper Car	1922 or earlier
Enterprise 75-Ton Ore Car	1946 or earlier
BP Chemicals Hopper Car	1984 or earlier
Tarmac PGA Stone Wagon	2004 or earlier
British Steel Hopper Car	1989 or earlier
L&Y Wagon	2006 or earlier
BR Shildon Hopper Car	1968 or earlier
Marcroft Hopper Car (1993)	2008 or earlier
Tomlinson Iron Ore Wagon	2004 or earlier
Steetley Hopper Car	1989 or earlier
Comeng Mineral Hopper Wagon	1967 or earlier

III. ANTICIPATION AND OBVIOUSNESS CLAIM CHARTS

The Asserted Claims are anticipated by and/or would have been obvious in view of the prior art identified herein. Appendices A-B to these contentions set forth a detailed basis for FreightCar America's contentions that each of the Asserted Claims are anticipated and/or obvious. As shown by these appendices, the identified prior art individually or in combination discloses every limitation of the Asserted Claims.

In view of the prior art disclosures set forth in the appendices, the state of the prior art, and the knowledge of a POSA, each Asserted Claim would have been anticipated and/or obvious in view of at least the prior art combinations set forth below for each claim. The specific combinations identified herein, however, are merely exemplary and any of the identified prior-art references could be used as a primary and/or secondary reference to reach the claimed subject matter. Indeed, the identified references all contribute to the scope and content of the prior art, which is the appropriate analysis under *Graham* and *KSR*, and which does not require FreightCar America to identify which references may be primary and/or secondary.

Persons of ordinary skill in the art at the time of filing the applications for the patents-in-suit knew to read references as a whole and in the context of other publications, literature, and the general knowledge in the field. FreightCar America may rely on all such information as well as other portions of the prior art references cited in these Initial Invalidity Contentions, other references and documents, and expert testimony, to establish that a limitation is inherent; to establish enablement of a prior art reference; to provide context and as aids to understanding and interpreting the listed references; and/or to establish that it would have been obvious for a person of ordinary skill in the art to modify or combine any of the cited references.

IV. MOTIVATION TO COMBINE PRIOR ART REFERENCES

Any required motivation to combine the prior art references discussed in these Initial Invalidity Contentions is found, explicitly or implicitly, in one or more of the following:

- A person of ordinary skill in the art's own knowledge or common sense;
- The prior art references themselves;
- The subject matter acknowledged as prior art in the '515 or '892 patents;
- The interrelated teachings of the multiple prior art references identified herein;

- The nature of the problem purportedly solved by the ’515 or ’892 patents;
- The ability to implement the alleged invention as a predictable variation of the prior art;
- Improvements in similar products;
- Any needs or problems known in the field and purportedly addressed by the ’515 or ’892 patents;
- The number of predictable solutions to the problem(s) purportedly addressed by the ’515 or ’892 patents;
- Reasonable expectations of a person having ordinary skill in the art that known prior art elements would maintain their respective properties or functions when they were combined;
- Express or implied reasons known by a person having ordinary skill in the art to combine known prior art elements and knowledge of how to combine those known prior art elements;
- Expectation that known prior art elements were capable of being combined, as well as the expectation that the combinations would have worked for their intended purpose;
- Express and/or implied teachings from the prior art as to why a person of ordinary skill would have combined known elements; and
- It is obvious to try a combination of prior art elements where the options to solve a known problem were finite and predictable.

The above noted motivations are incorporated by reference in all obviousness combinations and claim charts.

V. ADDITIONAL INVALIDITY GROUNDS

- The phrase "primary structure" renders Claims 1, 20 and 28 of the '515 Patent (and their dependent claims) indefinite under 35 U.S.C. § 112.
- The phrase "free of any primary structure" renders Claims 1, 20 and 28 of the '515 Patent (and their dependent claims) indefinite in violation of 35 U.S.C. § 112.
- The phrase "shear plate extending . . . cross-wise from side to side of said hopper car," in view of the claim construction implicit in NSC's infringement contentions, renders Claims 1, 7, 13, 18, 20, 24, and 32 28 of the '515 Patent (and their dependent claims) indefinite and/or lacking in written description support in violation of 35 U.S.C. § 112.
- Claim 2 of the'515 Patent is invalid for failing to narrow the scope of Claim 1, the independent claim from which Claim 2 depends.
- The phrase "said transition portion is located a distance above said first side sill that is in the range of ¼ to ⅔ L" and similar phrases render Claim 5 of the '892 Patent and Claim 44 of the '515 Patent indefinite and/or lacking in written description support in violation of 35 U.S.C. § 112.
- The phrase "a continuous section between said first and second regions" and similar phrases render Claims 1 and 2 of the '892 Patent and Claim 40 of the '515 Patent ((and their dependent claims) indefinite and/or lacking in written description support in violation of 35 U.S.C. § 112.

VI. DOCUMENT PRODUCTION

FreightCar America is producing or making available, or has already produced or made available for inspection, the related invalidating references. FreightCar America reserves the right to identify and produce additional documents.

April 10, 2025

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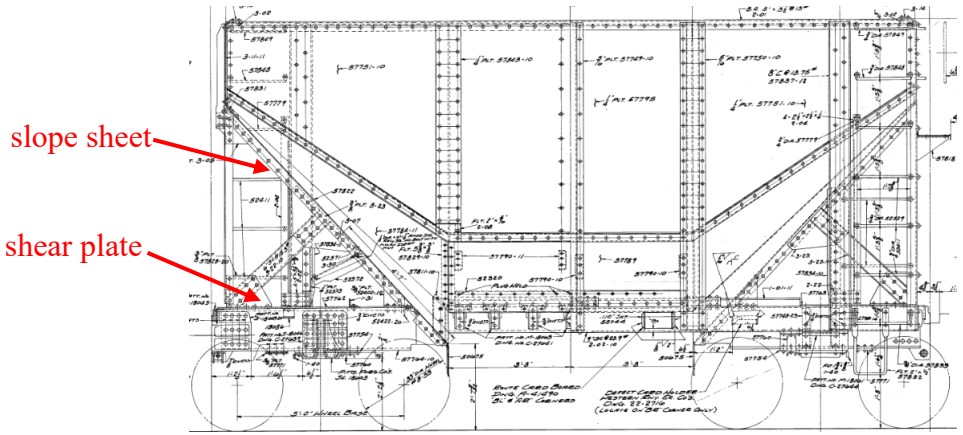
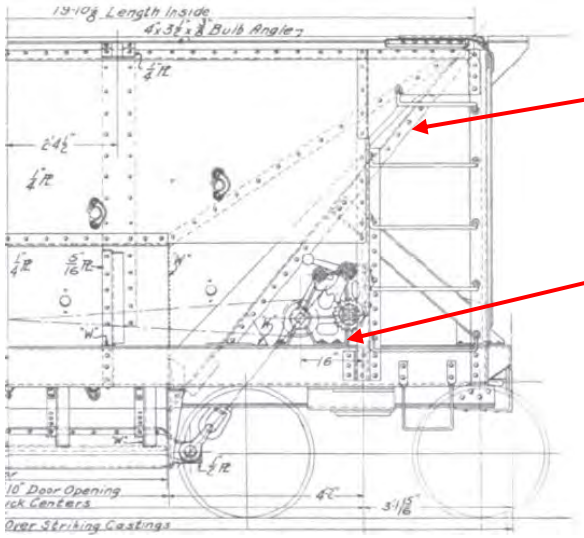
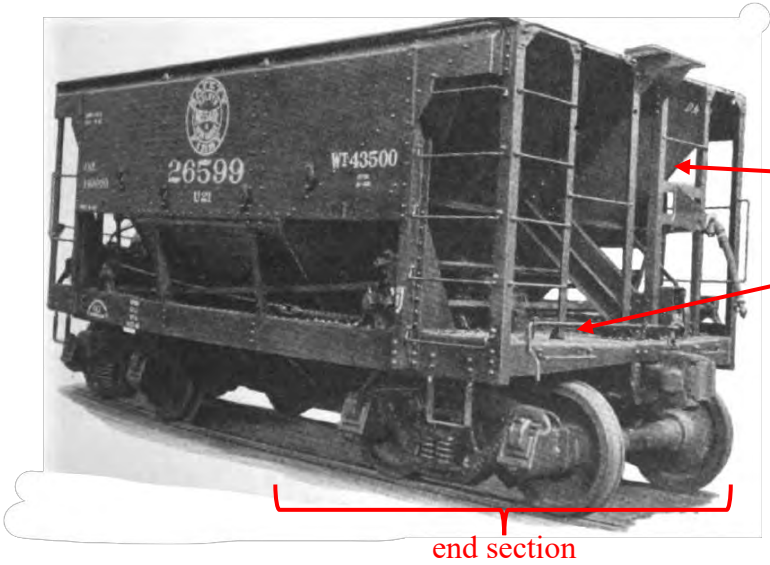
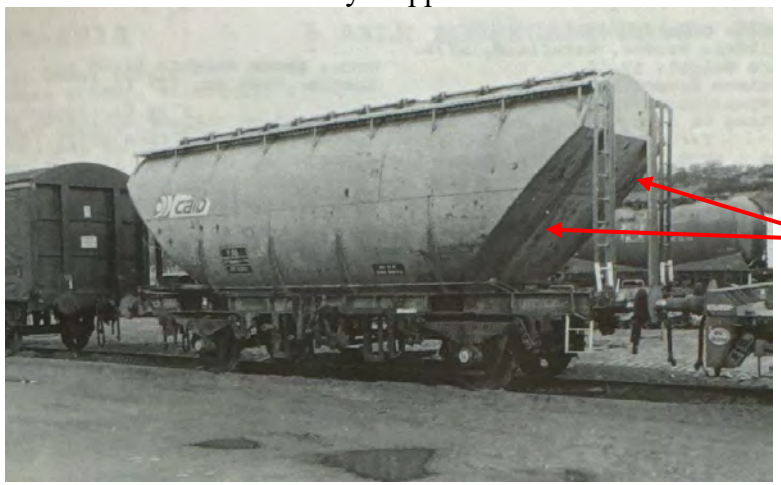
The Bethlehem Steel L.S.& I. Ore Car practiced this limitation.

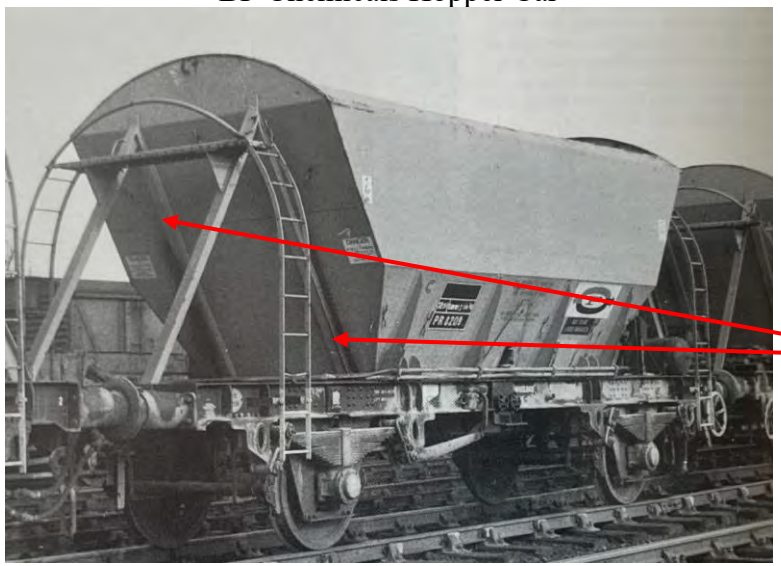


Lim.	Claim Language	Prior Art
		The Enterprise 75-Ton Ore Car discloses this limitation at least on pages 292 and 299 of the 1946 Cyclopedia. (*See also* the similar design in the Pressed Steel DM&IR Ore Car.)  

Steetley Hopper Car

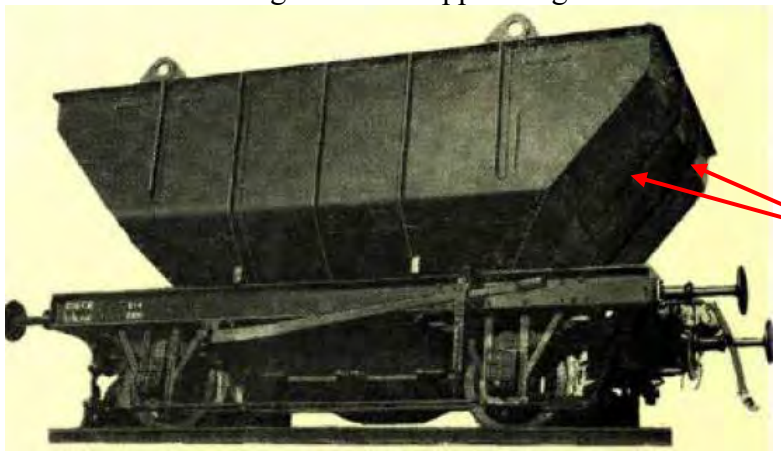


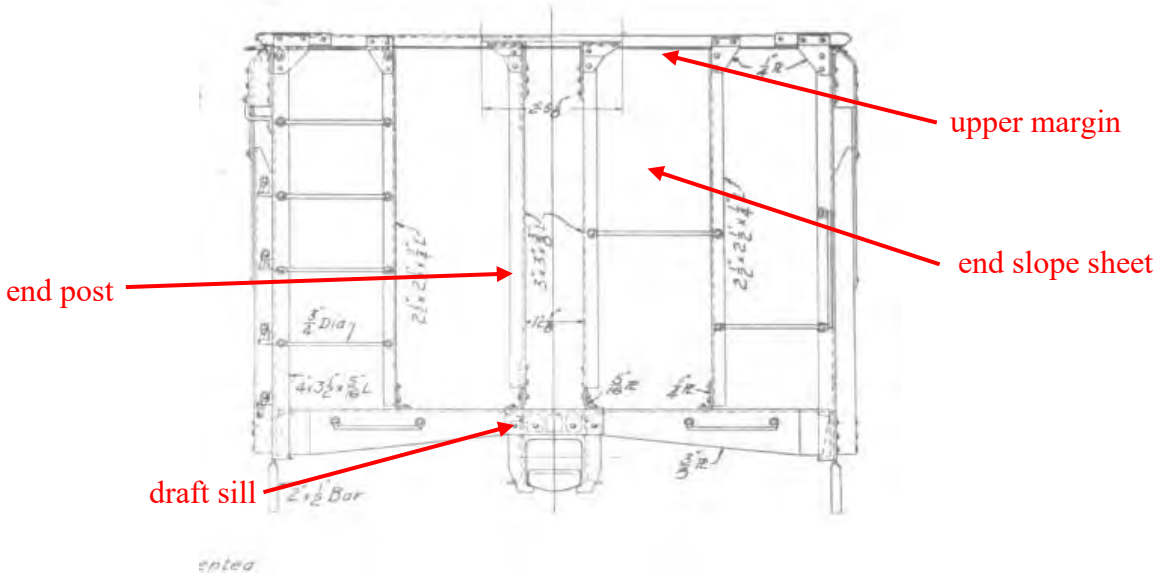
BP Chemicals Hopper Car



British Steel Hopper Car

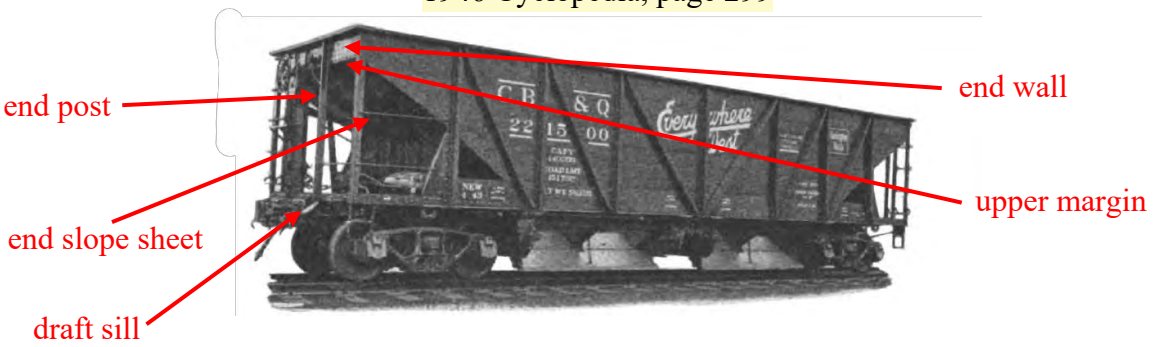
Comeng Mineral Hopper Wagon



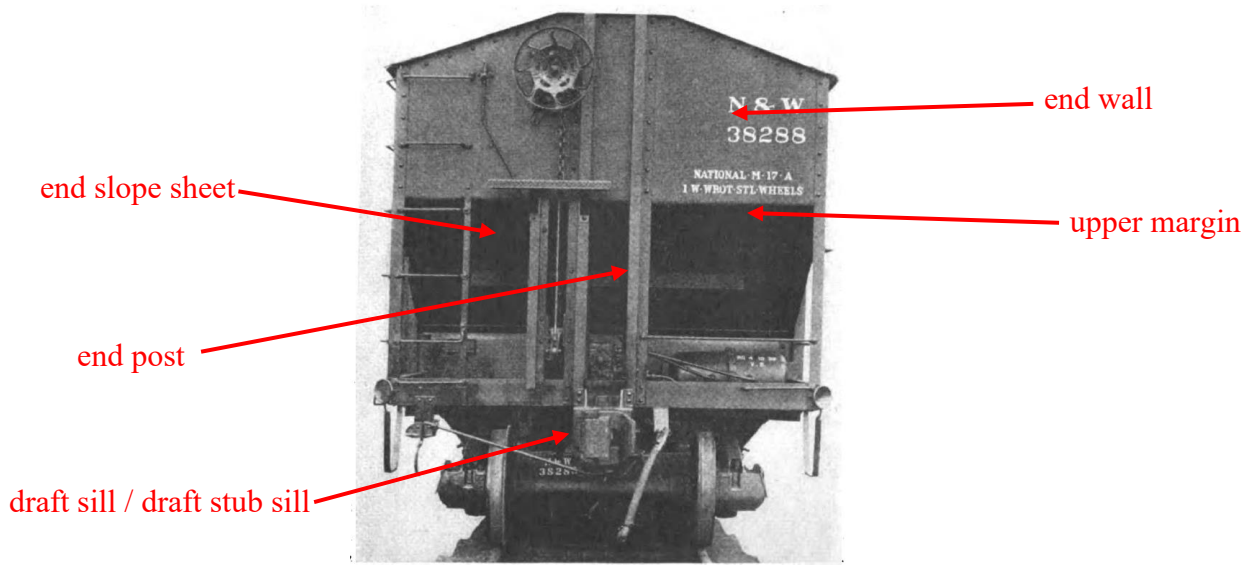
		The Enterprise 75-Ton Ore Car discloses the recited end post, slope sheet, upper wall and upper margin, as shown at least on pages 292 and 299 of the 1946 Cyclopedia. (*See also* the similar design in the Pressed Steel DM&IR Ore Car.)  It would have been obvious to a person of ordinary skill in the art to add an end wall above each end slope sheet in the Enterprise and Hart designs, as shown in the hopper cars below. Doing so would have been obvious because, *inter alia*, end walls were commonplace in freight cars and widely known (e.g., shown in the widely used Cyclopedia handbooks) for over a century before the '515 patent application; because there were only two basic designs for ore car side walls (either the slope sheet extends to the top margin of the car's side, or it stops at the bottom of an end wall extending down from the top margin); because a POSITA would have understood that adding end walls would allow the height and therefore the capacity of the ore car to be increased; because the Cyclopedia references contain suggestions to make this modification, such as by showing Enterprise hopper cars with and without end walls (see Enterprise car with end wall below); and because the L&Y reference contains a suggestion to modify the height of the freight car by describing and showing such a modification.

The 1946 Cyclopedia shows Enterprise hopper cars with the recited claim features, including end walls, at least on pages 259 and 299.

1946 Cyclopedia, page 299

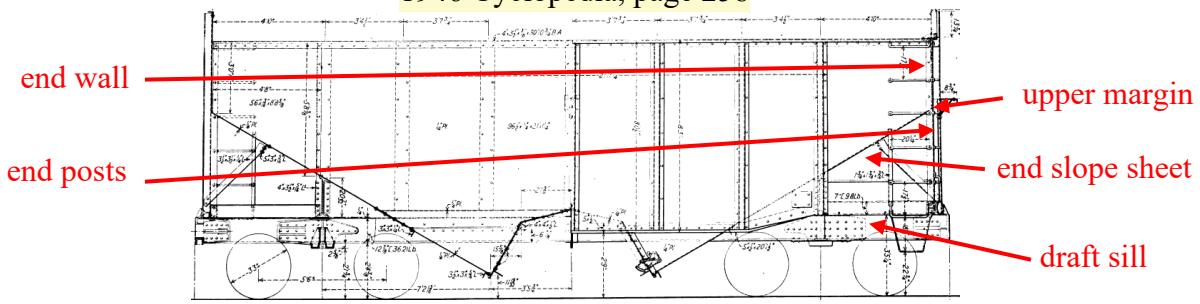


1946 Cyclopedia, page 259

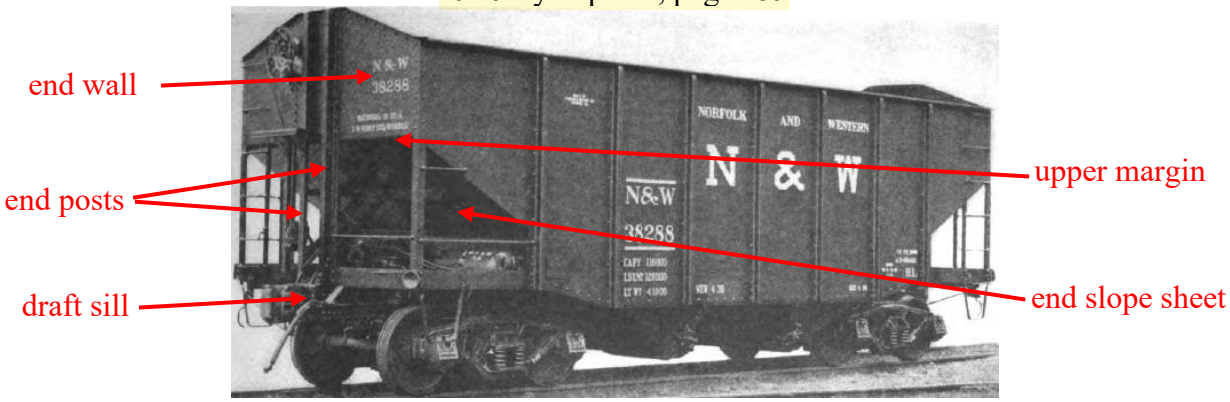


The 1946 Cyclopedia discloses the limitation at least on pages 258-59, 267, 273, 275-277, as shown below.

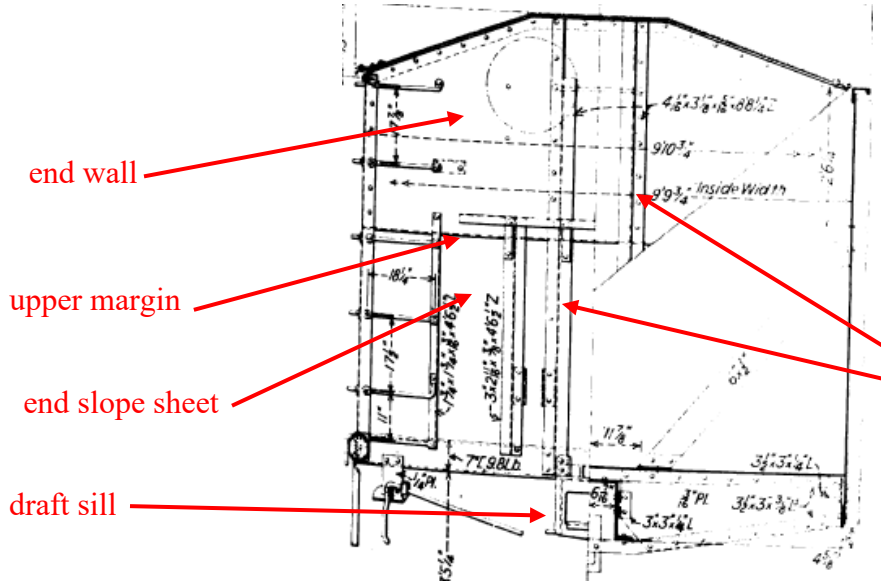
1946 Cyclopedia, page 258



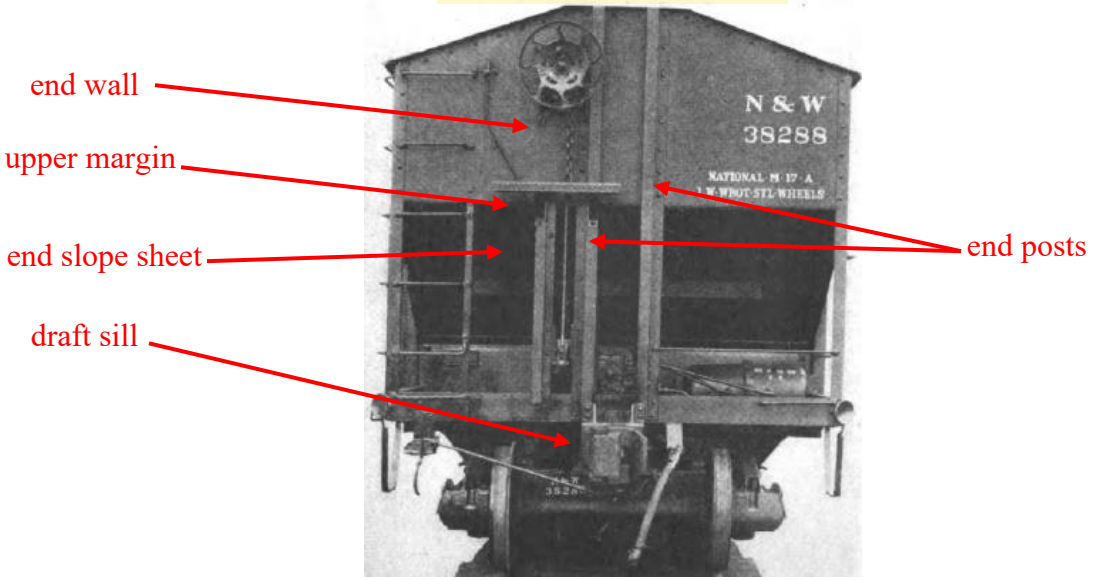
1946 Cyclopedia, page 259



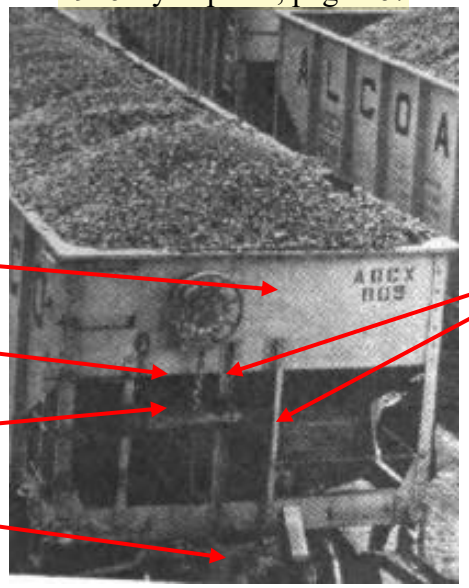
1946 Cyclopedia, page 259



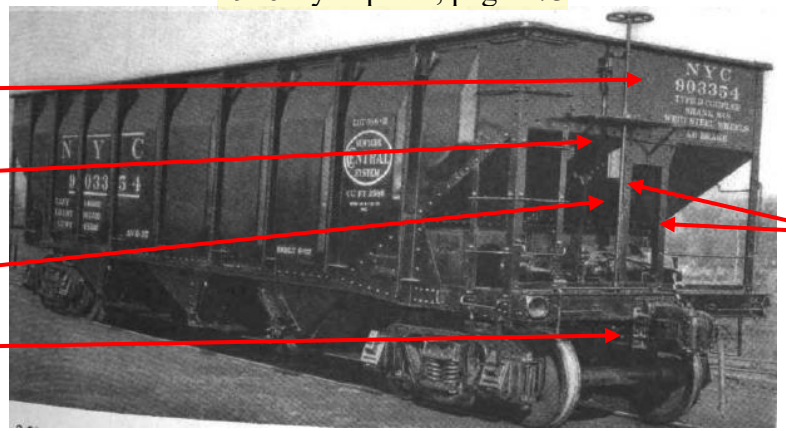
1946 Cyclopedia, page 259



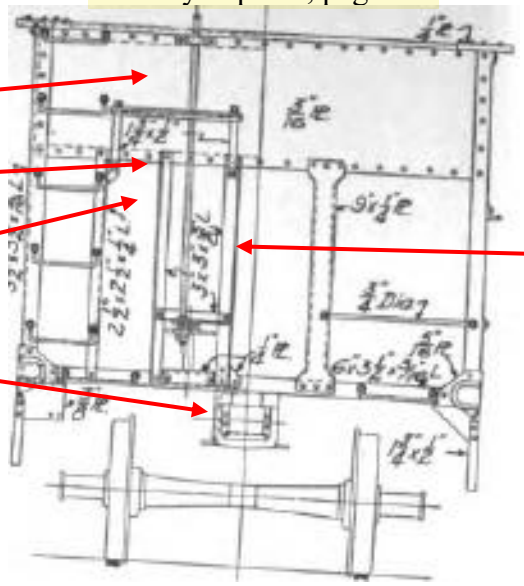
1946 Cyclopedia, page 267



1946 Cyclopedia, page 273

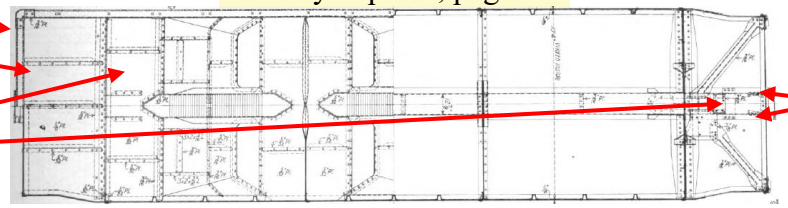


1946 Cyclopedia, page 275

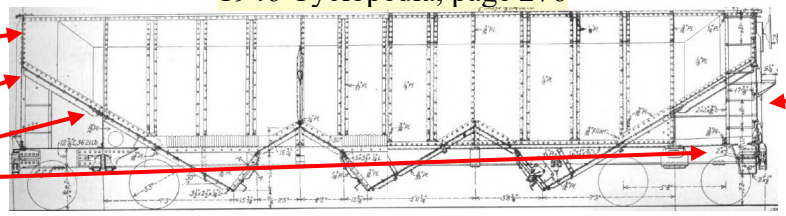


1946 Cyclopedia, page 275

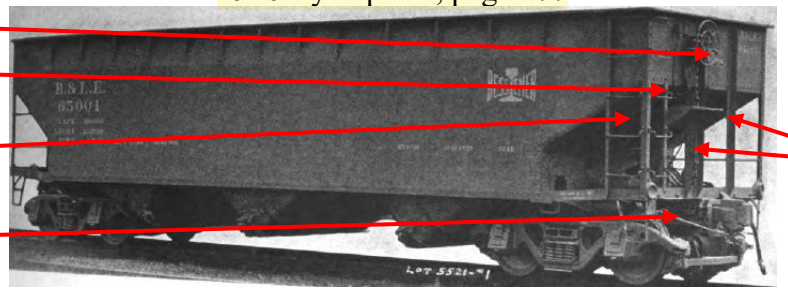
1946 Cyclopedia, page 275

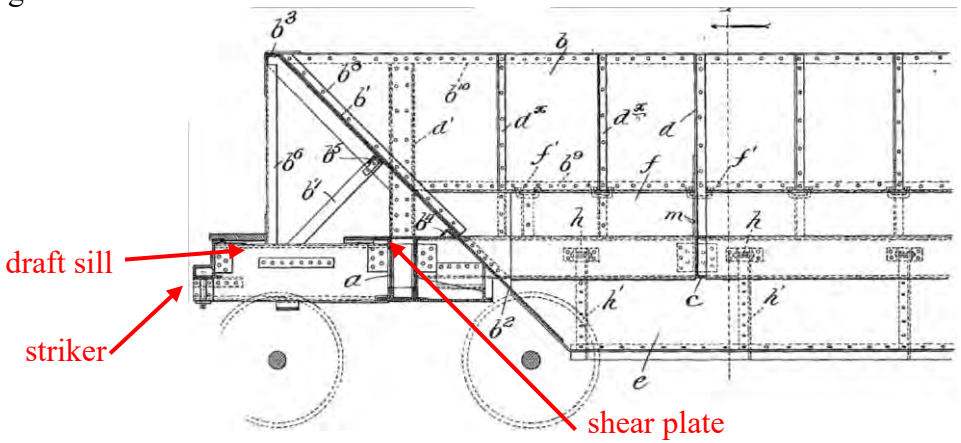


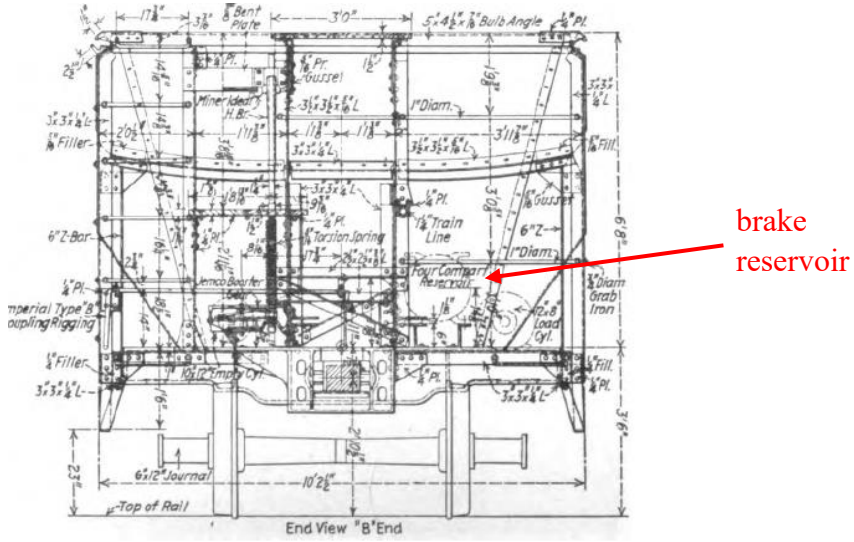
1946 Cyclopedia, page 276

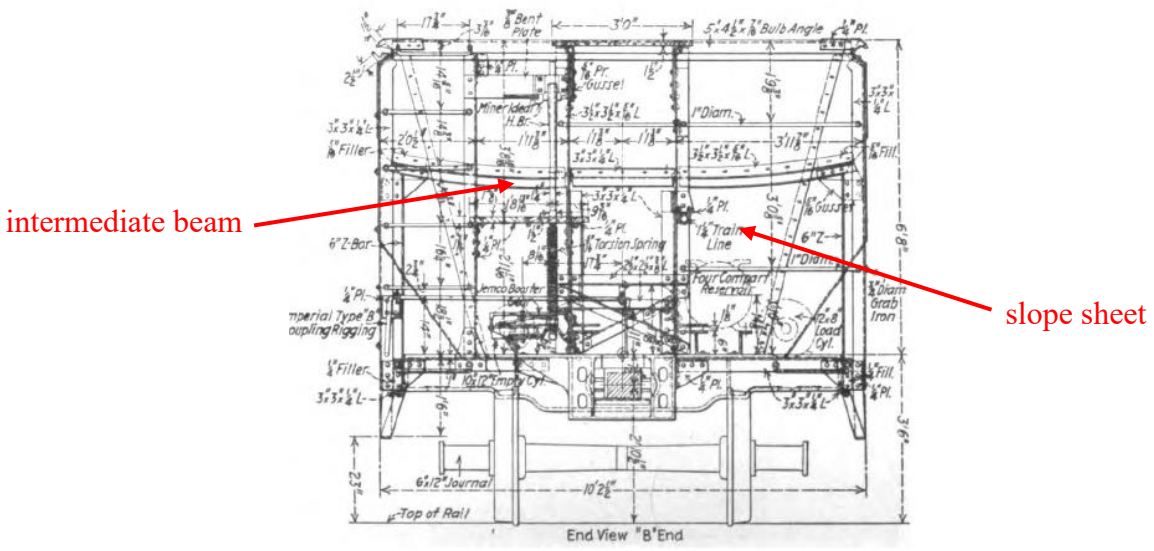


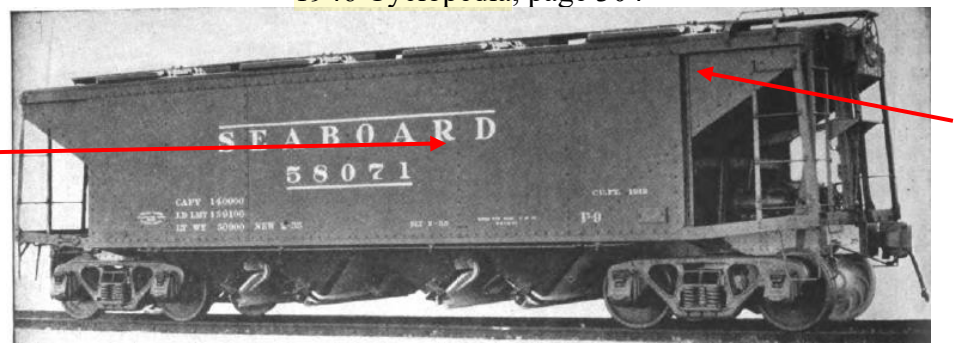
1946 Cyclopedia, page 277



Lim.	Claim Language	Prior Art
		The Hart Patent discloses the recited draft sill, striker and shear plate, as shown at least in Figure 1.  It would have been obvious to modify the Hart design to add an end post and end wall, for the reasons discussed above, and as shown in the examples above from the 1946 Cyclopedia. Further, as shown in the examples above, it was common practice and common sense to mount end posts to the draft sill or to a portion of the shear plate above the draft sill, to facilitate transmission of loads to the draft sill and ultimately to the bolster. Finally, as reflected in the 1946 Cyclopedia (pp. 62, 254, 262-63, 276-77, 280-81, 972-74, 979, 1116), it would have been obvious to add a striker, a standard component on rail cars, even if Hart had not expressly disclosed it.

		The Pressed Steel DM&IR Ore Car discloses this limitation at least on page 290 of the 1946 Cyclopedia and page 809 of the 1953 Cyclopedia. 

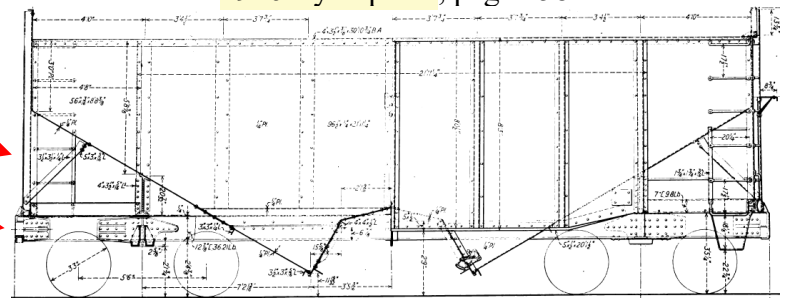
		The Pressed Steel DM&IR Ore Car discloses reinforcing the middle of the slope sheet, as shown on page 290 of the 1946 Cyclopedia. 

17	The railroad hopper car of claim 7 wherein said first and second side walls of said hopper car define sidewalls of said hopper, and said first and second side walls include end portions that are stepped laterally inboard, and said second hollow section beam extends between said end portions of said first and second side walls that are stepped laterally inboard.	It would have been obvious to add an inward step to one end of each side wall in the Hart Patent, the Enterprise 75-Ton Ore Car, or the Bethlehem Steel L.S.& I. Ore Car. So modified, the upper (second) hollow beam – the beam closest to the end of the hopper car – would extend between the stepped portions of the side walls. A person of ordinary skill in the art would have been motivated to add these inward steps because this was a well-known and commonplace means for creating space for a ladder on each side of the car. Among the many examples of such steps are the hopper cars shown on pages 276-77, 284, 285, 288, and 304 of the 1946 Cyclopedia and pages 257 and 260 of the 1953 Cyclopedia. Some of these examples from the Cyclopedias are shown below. 1946 Cyclopedia, page 285  1946 Cyclopedia, page 304 

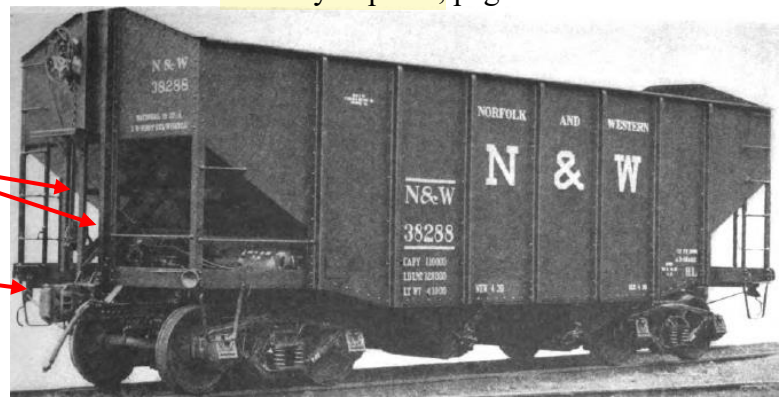
1997 Cyclopedia discloses the limitation at least on page 73.

The 1946 Cyclopedia discloses the limitation at least on pages 258-59, 267, 273, 275-277.

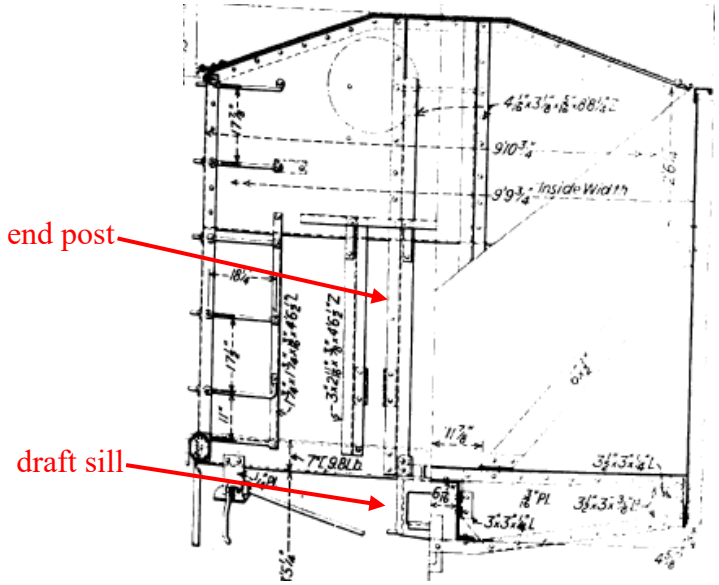
1946 Cyclopedia, page 258



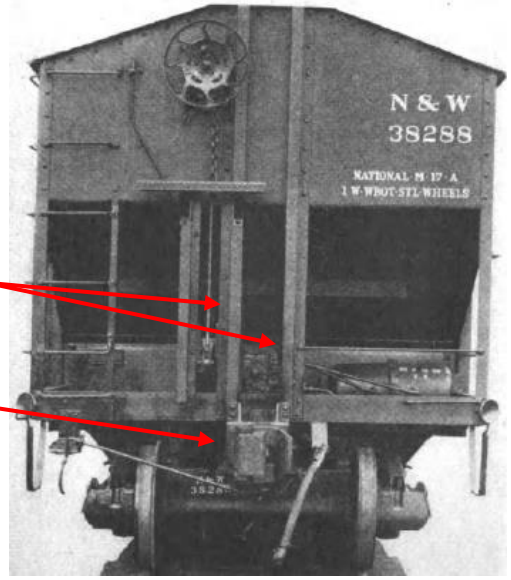
1946 Cyclopedia, page 259



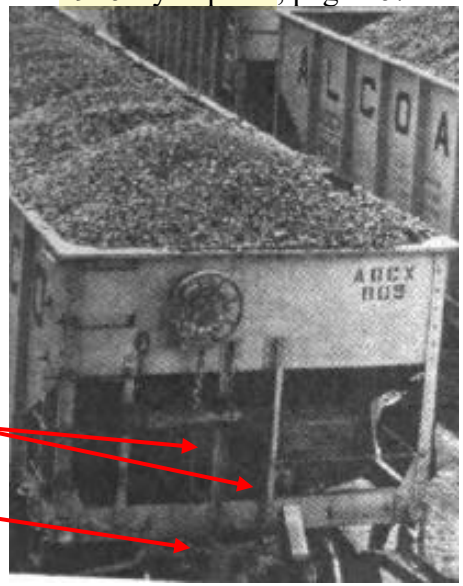
1946 Cyclopedia, page 259



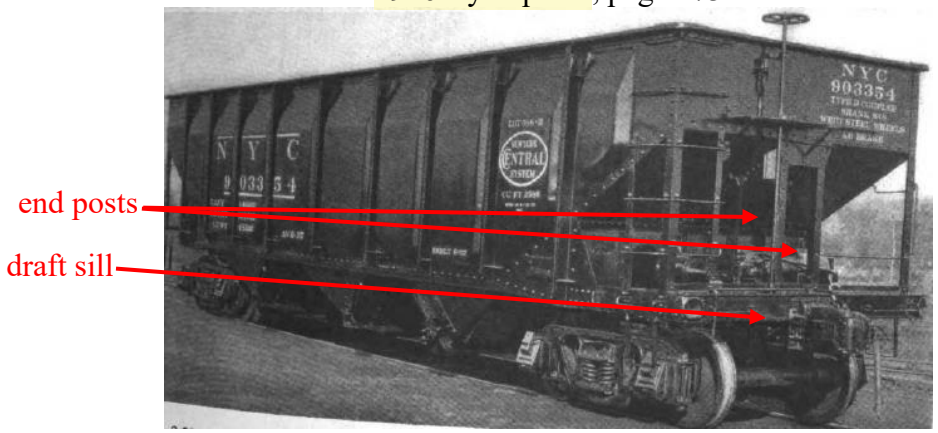
1946 Cyclopedia, page 259



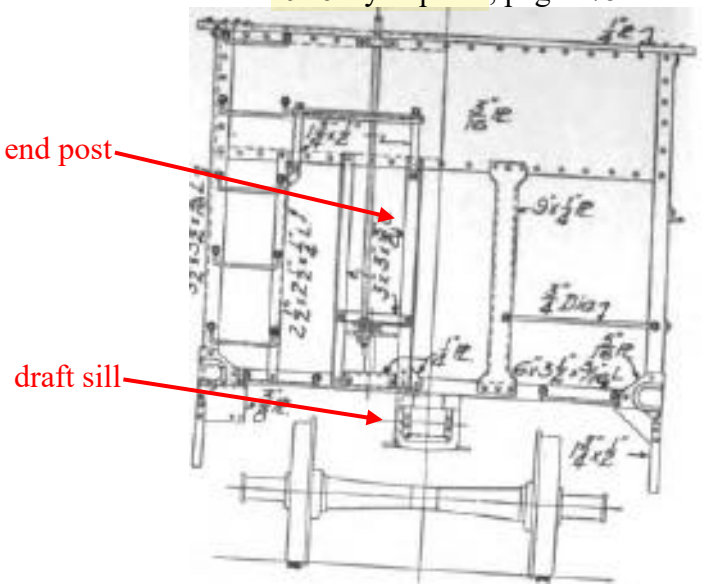
1946 Cyclopedia, page 267



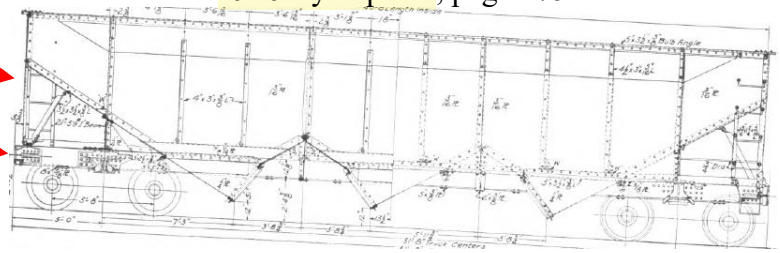
1946 Cyclopedia, page 273



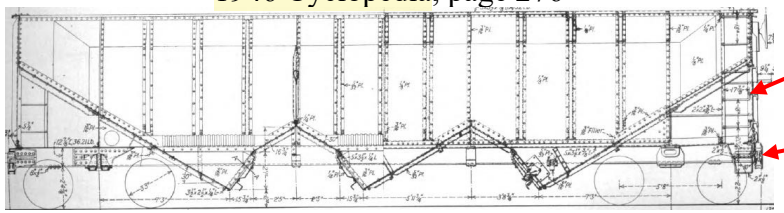
1946 Cyclopedia, page 275



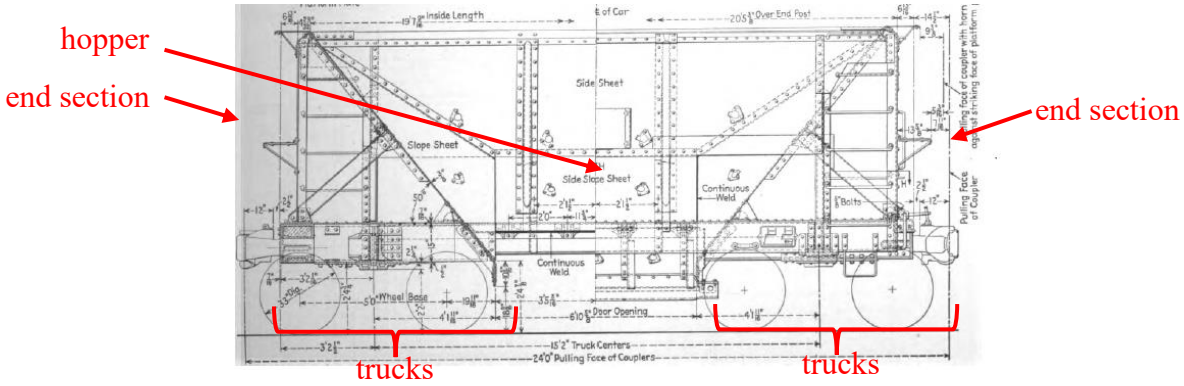
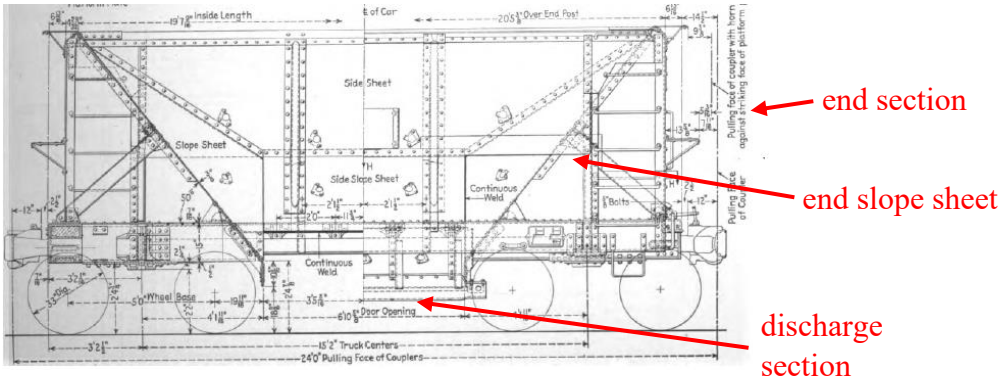
1946 Cyclopedia, page 275

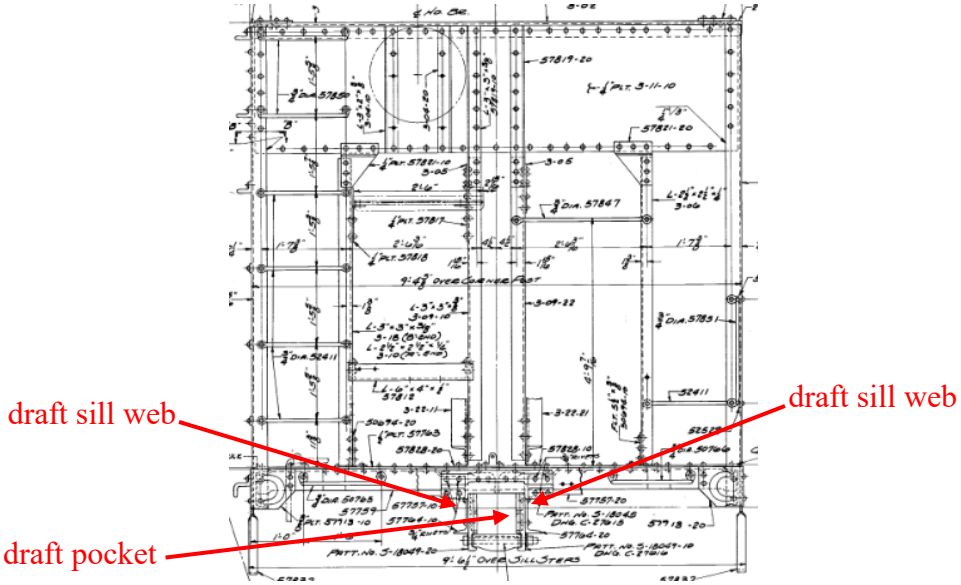
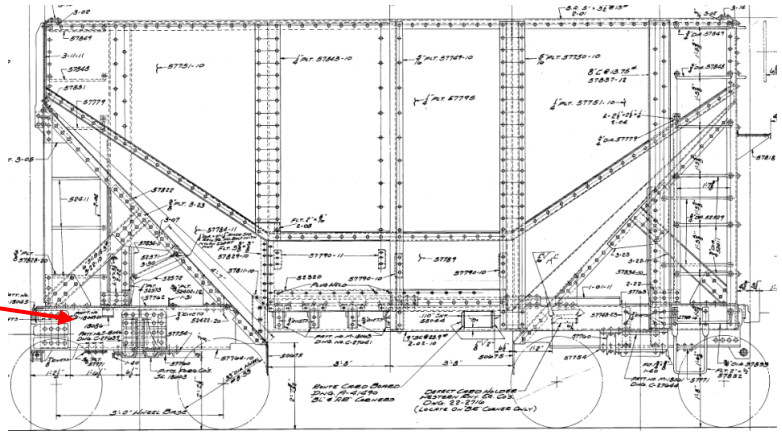


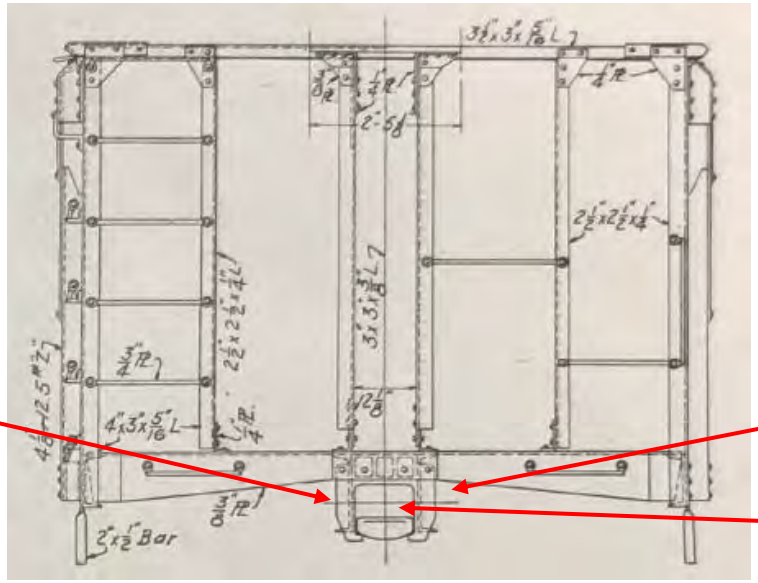
1946 Cyclopedia, page 276



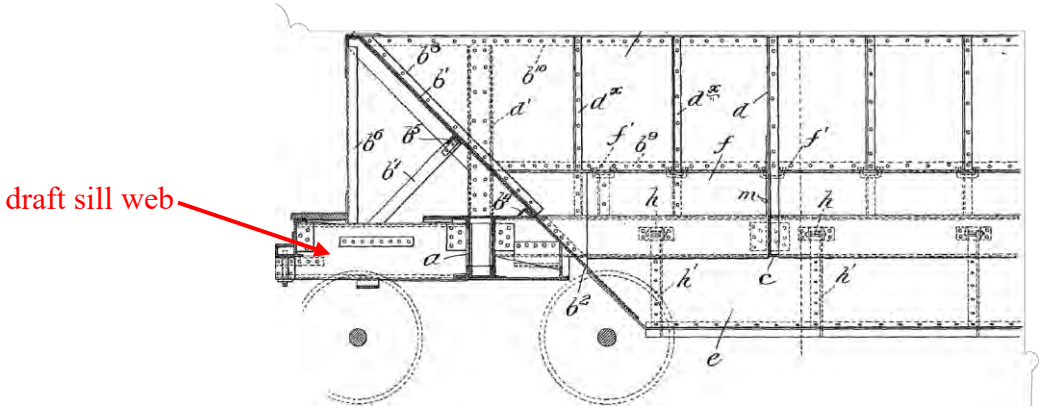
1946 Cyclopedia, page 277

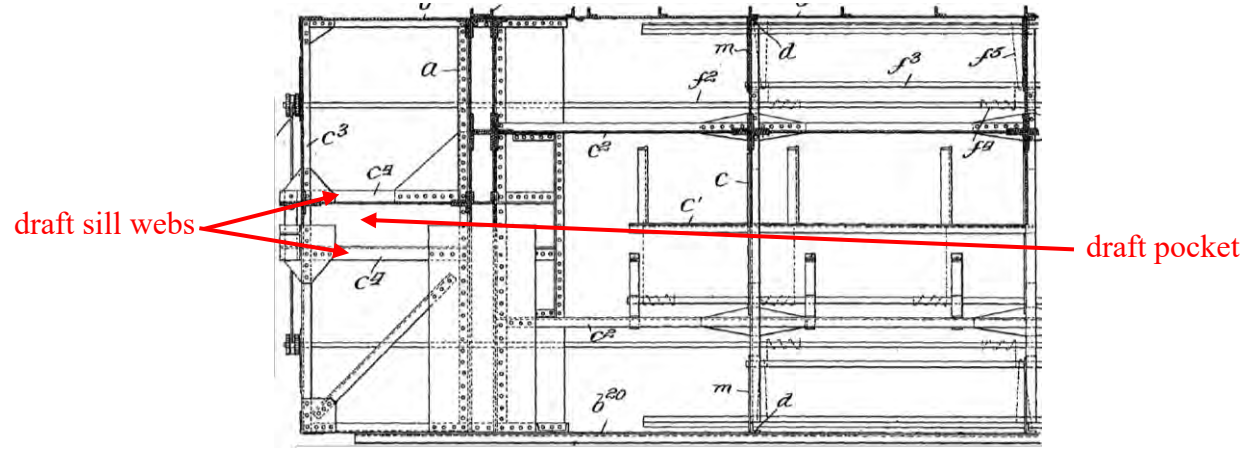
32a	A railroad hopper car, said hopper car comprising: a hopper; first and second end sections for carriage by respective first and second rail road car trucks for rolling motion along railroad tracks in a longitudinal direction; said hopper being suspended between said first and second end sections,	*See* limitation 1a. The NSC 50-Ton Ore Car discloses this limitation at least on page 294 of the 1946 Cyclopedia. 
32b	said hopper having a discharge section through which to release lading, and a first end slope sheet oriented toward said first end section, said first end slope sheet being inclined in the longitudinal direction to feed said discharge section;	*See* limitation 1b. The NSC 50-Ton Ore Car discloses this limitation at least on page 294 of the 1946 Cyclopedia. 

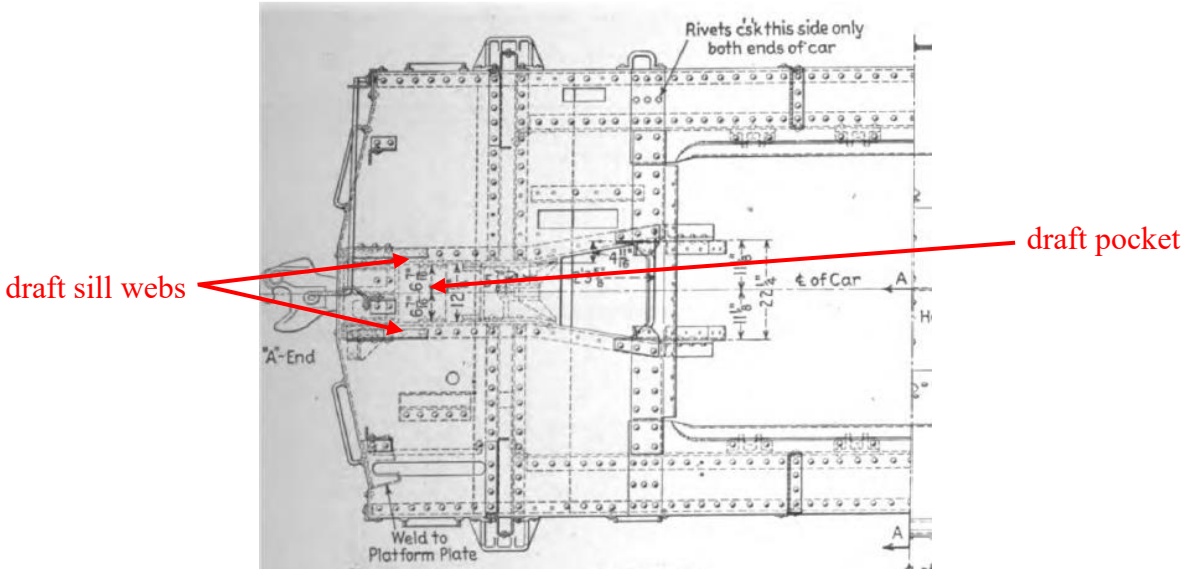
32c	said first end section including a draft sill extending in the longitudinal direction, said draft sill having first and second spaced apart longitudinally running draft sill webs and a draft pocket defined therebetween;	The Bethlehem Steel L.S.&I. Ore Car practiced this limitation.  

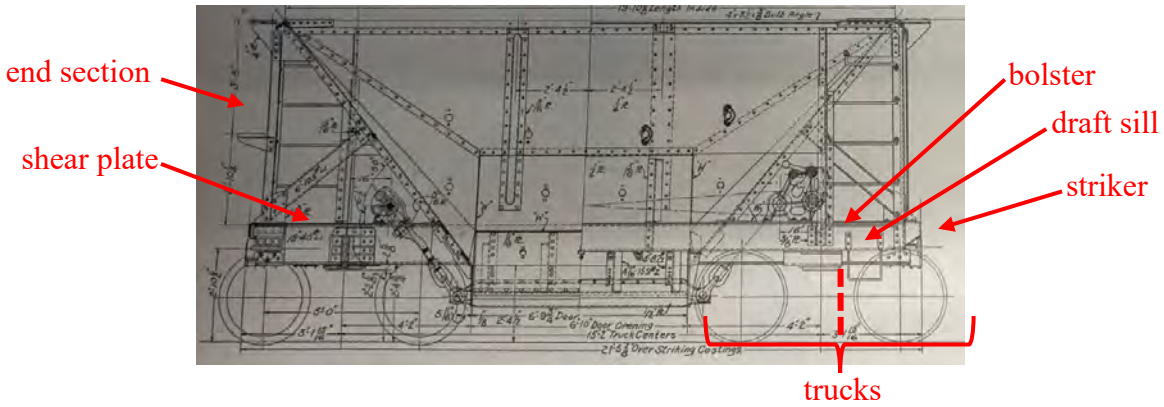
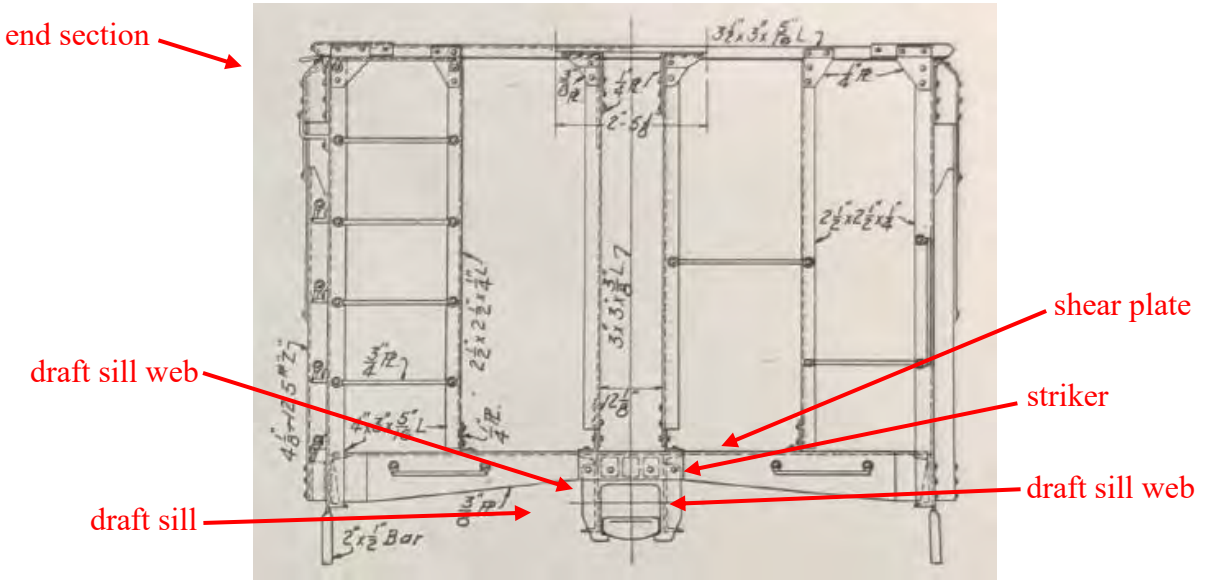
		The Enterprise 75-Ton Ore Car discloses this limitation at least on page 238 of the 1953 Cyclopedia. 

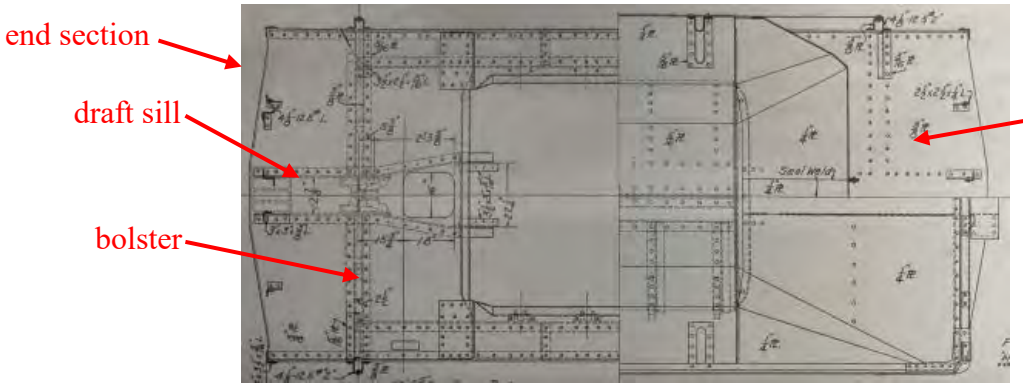
The Hart patent discloses this limitation at least in figures 1 and 3 and 1:101-103.

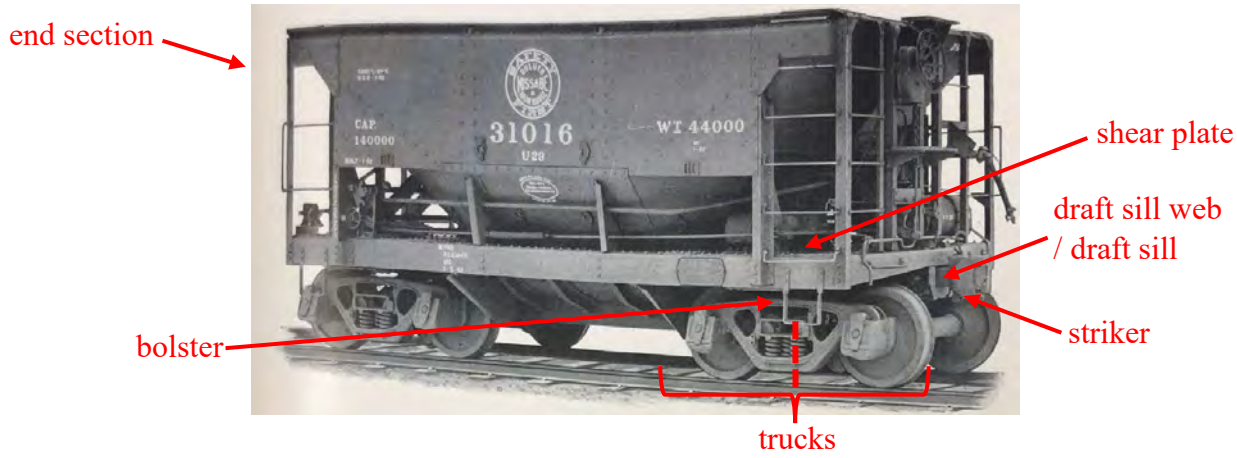




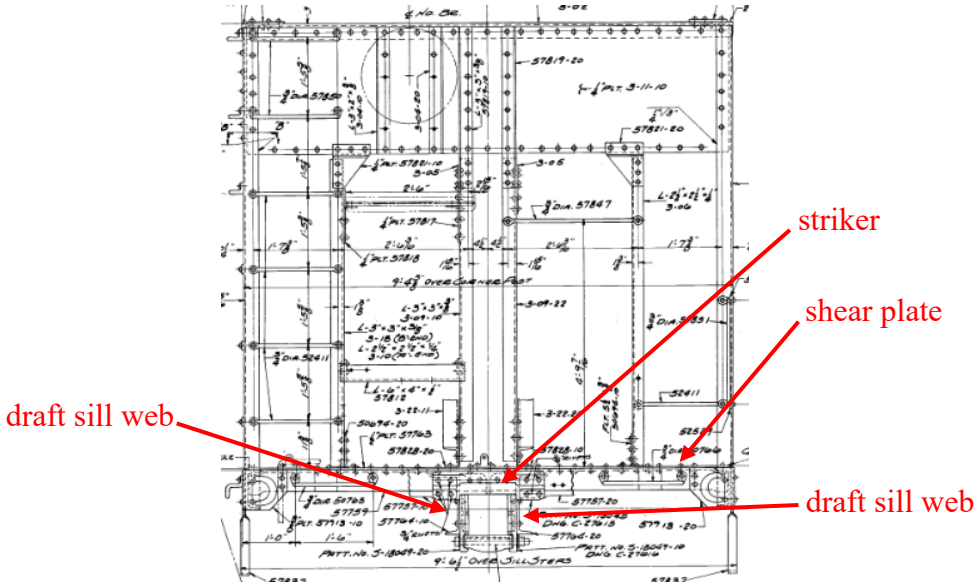
		The NSC 50-Ton Ore Car discloses this limitation at least on page 294 of the 1946 Cyclopedia. 

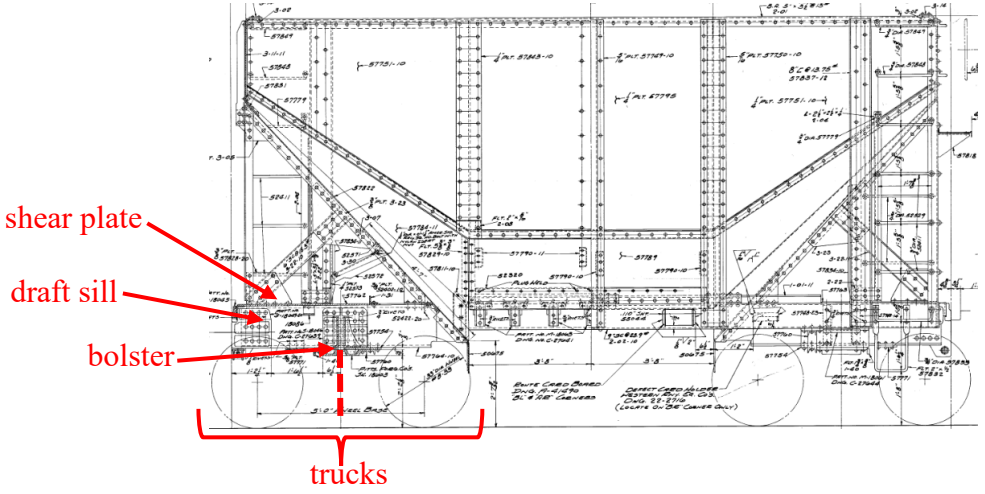
32d	said first end section including a main bolster extending cross-wise to said draft sill; said first end section having a truck center where said main bolster meets said draft sill; said draft sill having a striker end longitudinally outboard of said truck center; said first end section including a shear plate; said shear plate overlying said draft sill webs and said main bolster, said shear plate extending longitudinally along said draft sill and cross-wise from side to side of said hopper car; said shear plate having an outboard margin running across said car distant from said truck center and proximate said striker end;	The Enterprise 75-Ton Ore Car discloses this limitation at least on pages 238 and 239 of the 1953 Cyclopedia.  

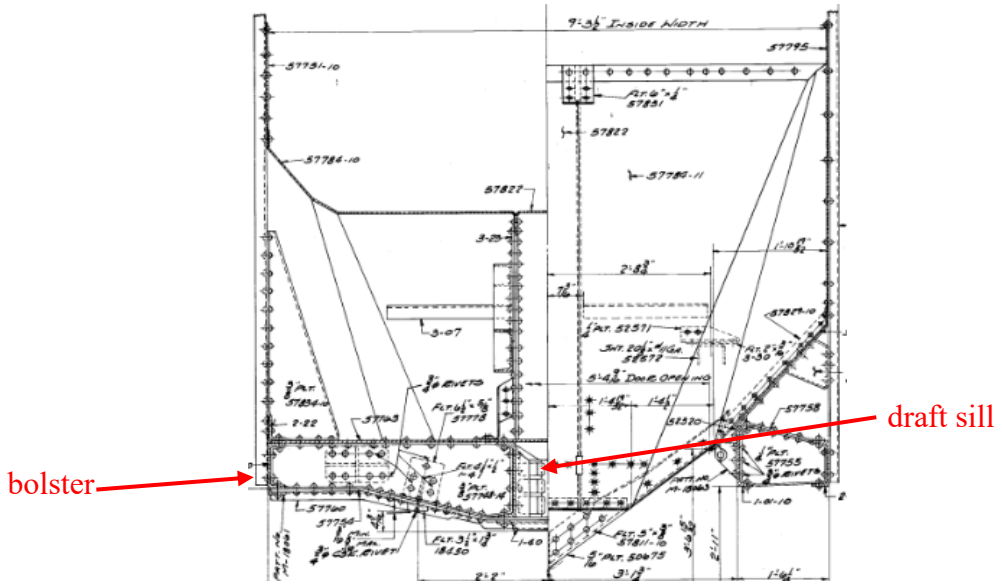

end section
draft sill
bolster
shear plate

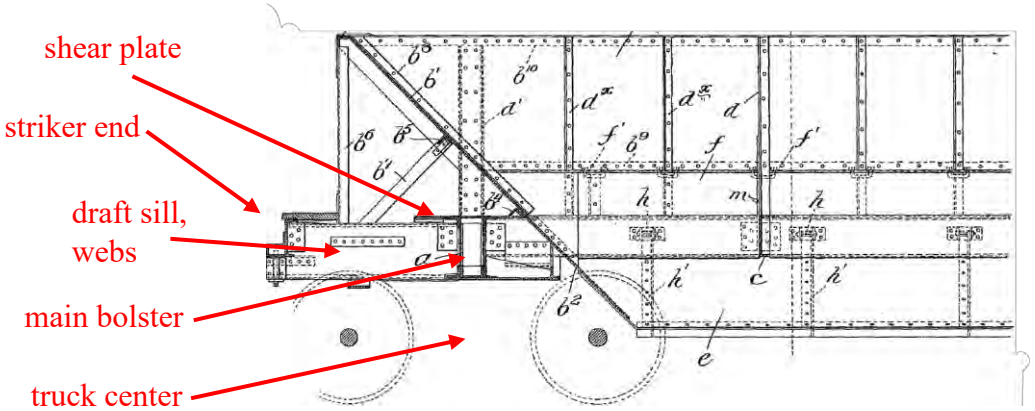

end section
bolster
shear plate
draft sill web
/ draft sill
striker
trucks
31016
WT 44000

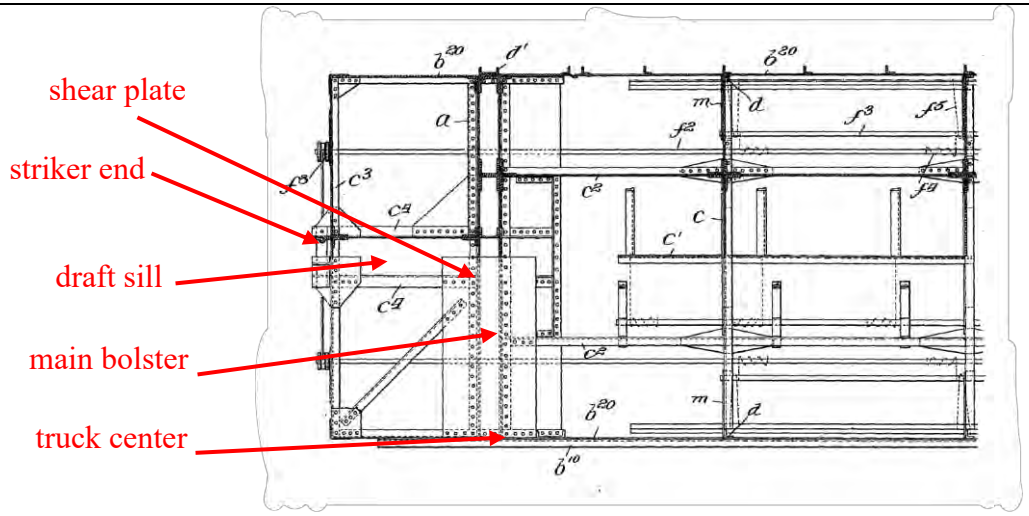
The Bethlehem Steel L.S.&I. Ore Car practiced this limitation.





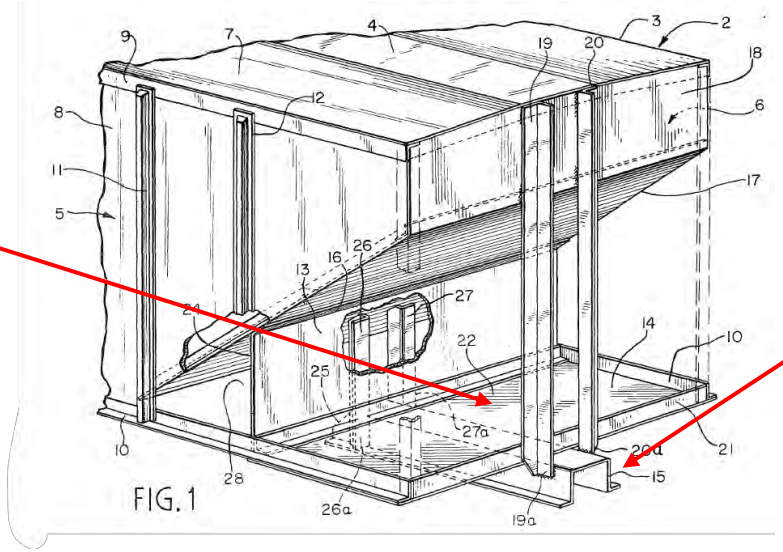

bolster
draft sill

		The Hart Patent discloses all of this limitation other than a shear plate with "an outboard margin running across said car distant from said truck center and proximate said striker end." 

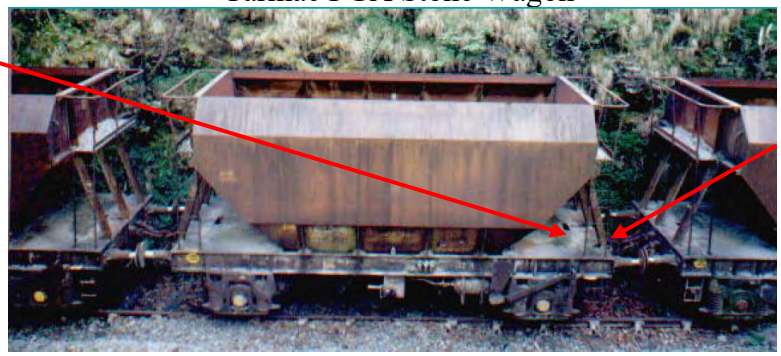


It would have been obvious to modify Hart's shear plate so that it extended longitudinally to the end of the car, such that its shear plate would have "an outboard margin running across said car distant from said truck center and proximate said striker end." Such strike plates are taught by the Stark Patent in Figure 1 and at 2: 10-14; the Tarmac PGA Stone Wagon; the Lindstrom II Patent in Figure 1 and at 1:101-104 and 2: 4-8; and the NSC 50-Ton Ore Car on at least page 294 of the 1946 Cyclopedia.

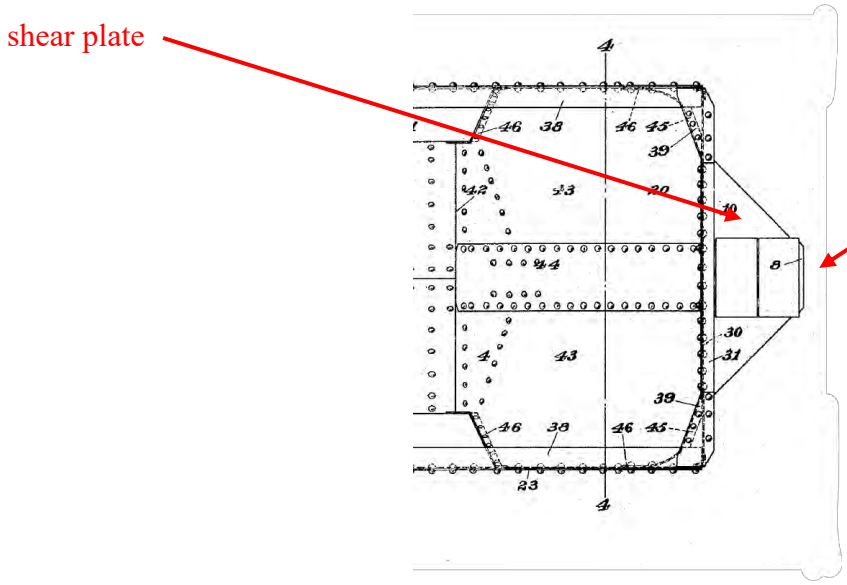
Stark Patent



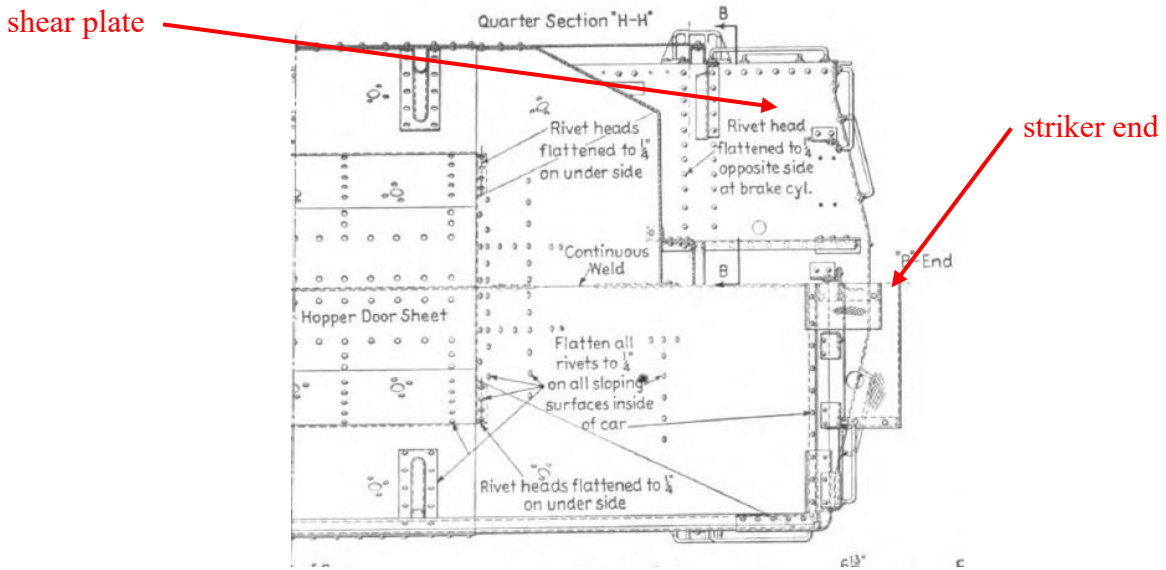
Tarmac PGA Stone Wagon



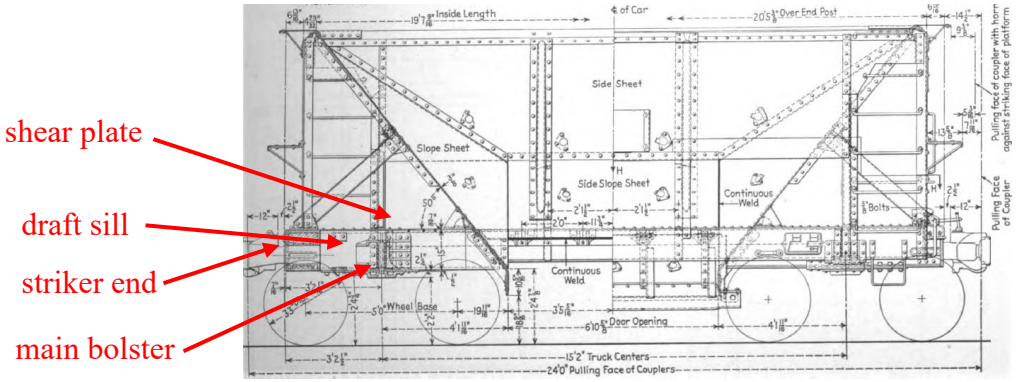
Lindstrom II Patent



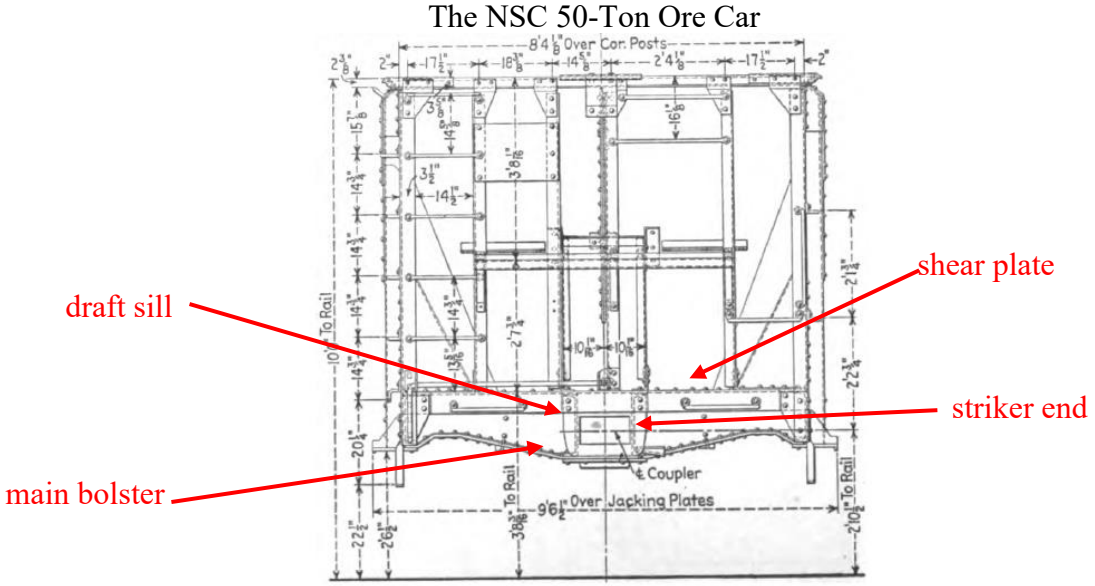
NSC 50-Ton Ore Car



The NSC 50-Ton Ore Car



The NSC 50-Ton Ore Car



A person of ordinary skill in the art would have been motivated to extend the shear plate in this manner, *inter alia*, because such shear plates were common and well-known in hopper cars; because it would provide a larger surface on which to place machinery; and because it would allow the entire outboard end to be fastened to the end sill or similar structure, thereby increasing the strength and stability of the underframe of the hopper car.

Furthermore, as discussed above, a person of ordinary skill in the art would understand that a striker is a standard component of a train car as reflected at least on pages 62, 254, 262-63, 276-77, 280-81, 972-74, 979, and 1113 of the 1946 Cyclopedia (partially reproduced below), rendering it an obvious addition even if it were not expressly disclosed by the Hart patent.

1946 Cyclopedia, page 62

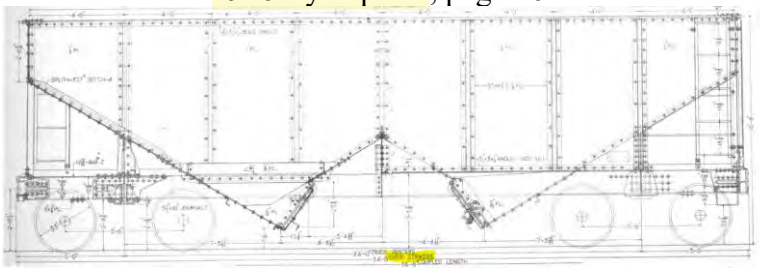
Striker. See STRIKING PLATE.

Striker Arm. A seat arm. The terms striker arm, seat back arm and seat arm are commonly used.

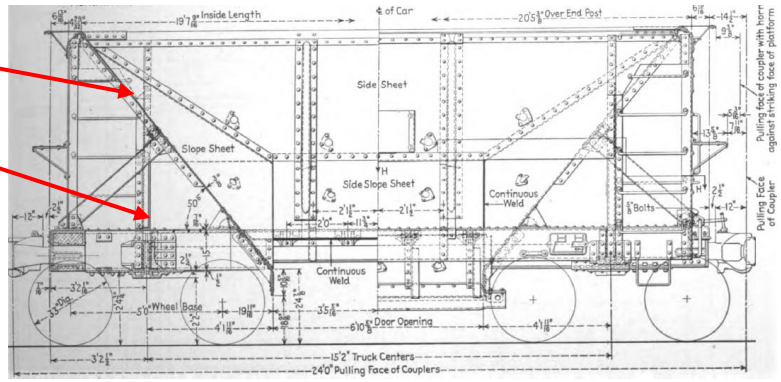
Striking Horn. The stop shoulder, or horn of a coupler, arranged to touch the striking plate before the draft gear goes solid.

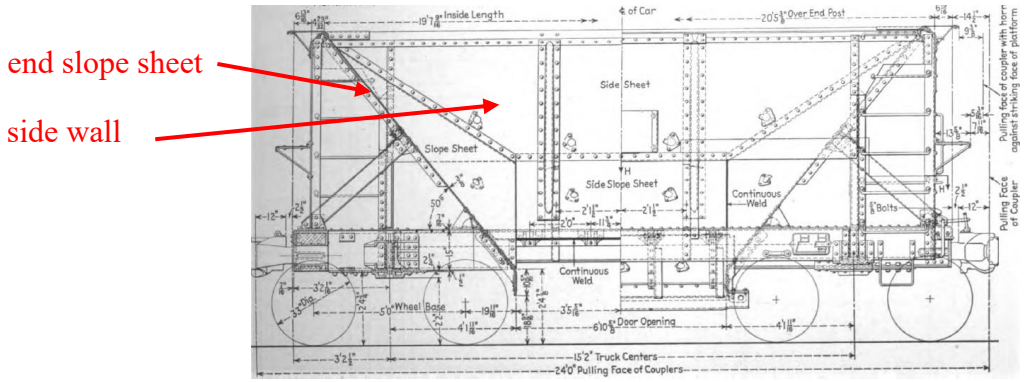
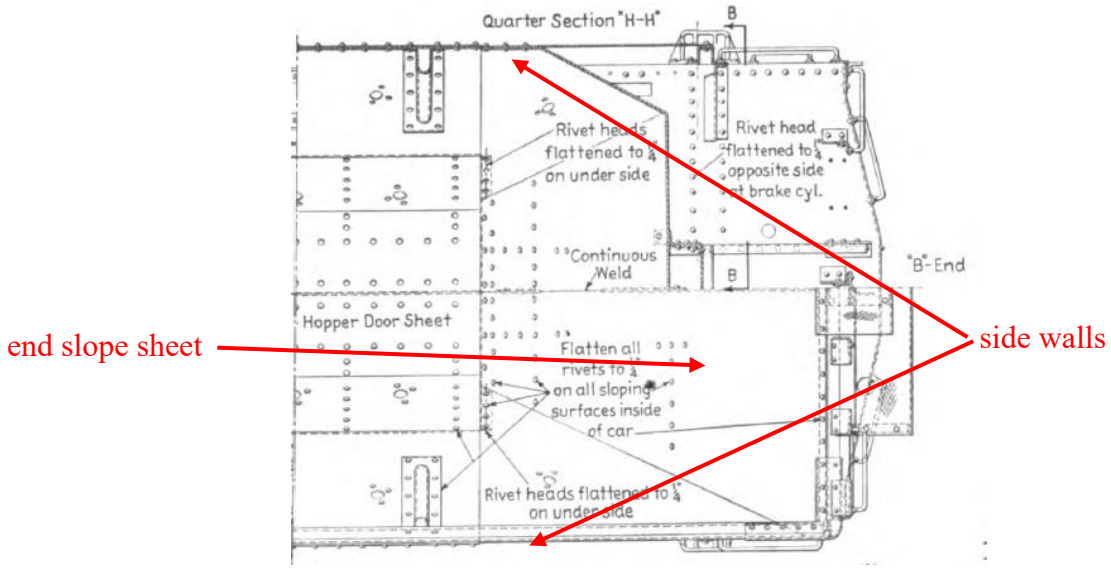
Striking Plate. A member placed on the ends of the center sills of freight cars against which the horn of the coupler strikes, preventing damage to the draft gear and center sills.

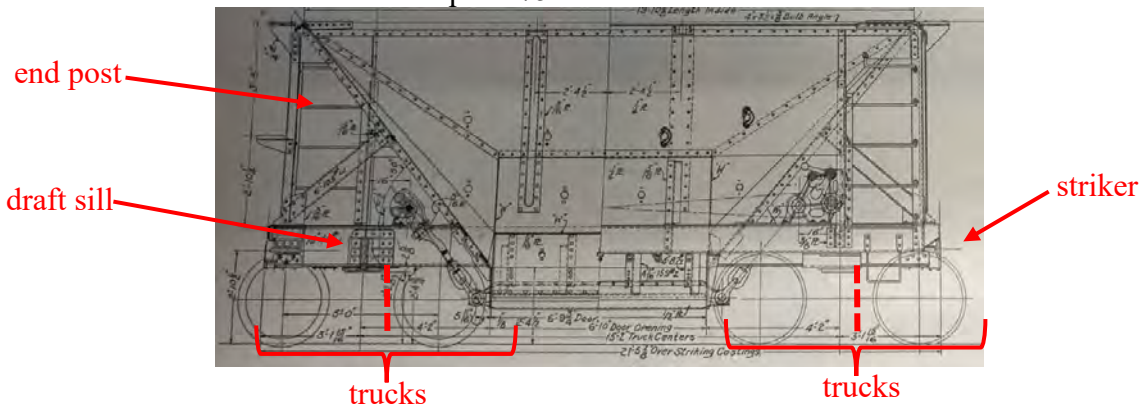
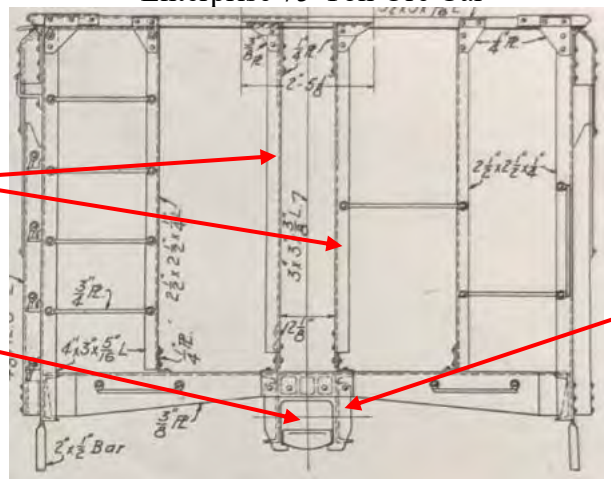
1946 Cyclopedia, page 262



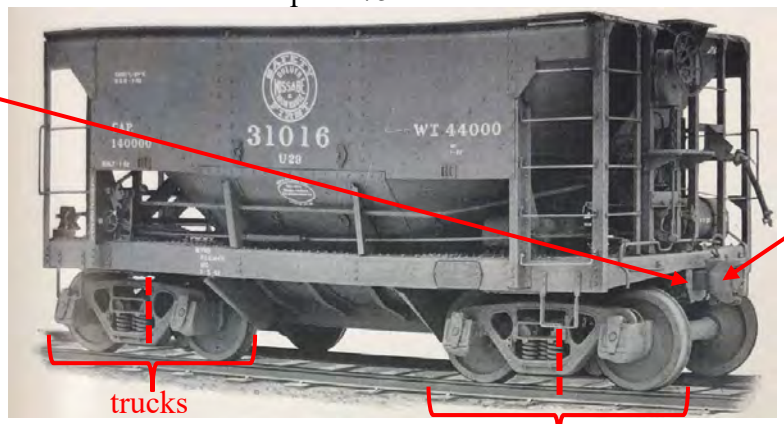
		1946 Cyclopedia, page 972  Fig. 10.101—Swivel shank coupler, swivel yoke, and attachments. Fig. 10.102 — Striker with Integral Front Lugs and Swing Coupler Carrier. Fig. 10.103—Swing Motion Striker with Integral Front Lugs. Fig. 10.104—Bolster Center Filler and Rear Draft Gear Lugs for box car. Fig. 10.105—Bolster Center Filler and Rear Draft Lugs for hopper car. The Buckeye Steel Castings Company (See also Page 973)

32e	said first end slope sheet over-hanging said shear plate of said first end section;	*See* limitation 7d. The NSC 50-Ton Ore Car discloses this limitation at least on page 294 of the 1946 Cyclopedia. end slope sheet shear plate 

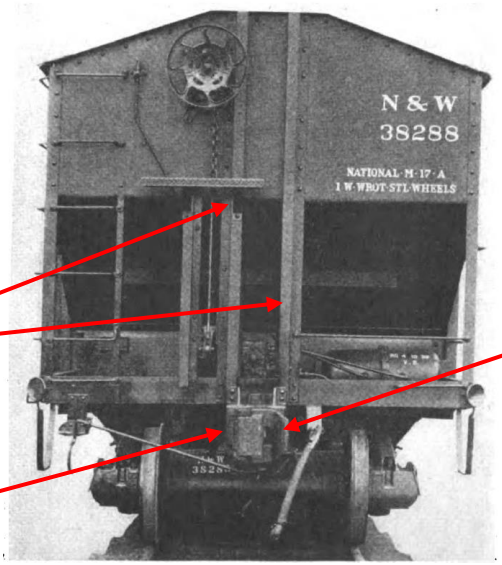
32f	first and second side walls running lengthwise along first and second sides of said car, said first end slope sheet of said hopper extending cross-wise between said first and second side walls;	*See* limitation 7e. The NSC 50-Ton Ore Car discloses this limitation at least on page 294 of the 1946 Cyclopedia.  

32i	said first end section includes an end post extending upwardly of said draft sill, said end post being mounted above said draft sill distant from said truck center and proximate said striker end; said end post extending upwardly to meet said first beam and said top chord;	The Enterprise 75-Ton Ore Car discloses this limitation at least on page 299 of the 1946 Cyclopedia and pages 238 and 239 of the 1953 Cyclopedia, and the limitation is also disclosed on page 259 of the 1946 Cyclopedia. Enterprise 75-Ton Ore Car  Enterprise 75-Ton Ore Car 

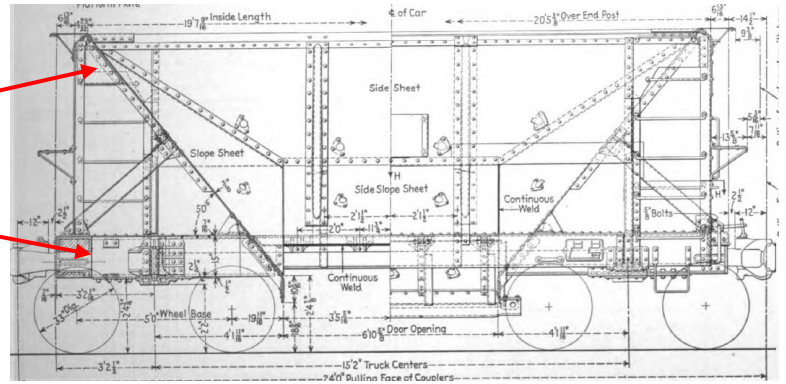
Enterprise 75-Ton Ore Car

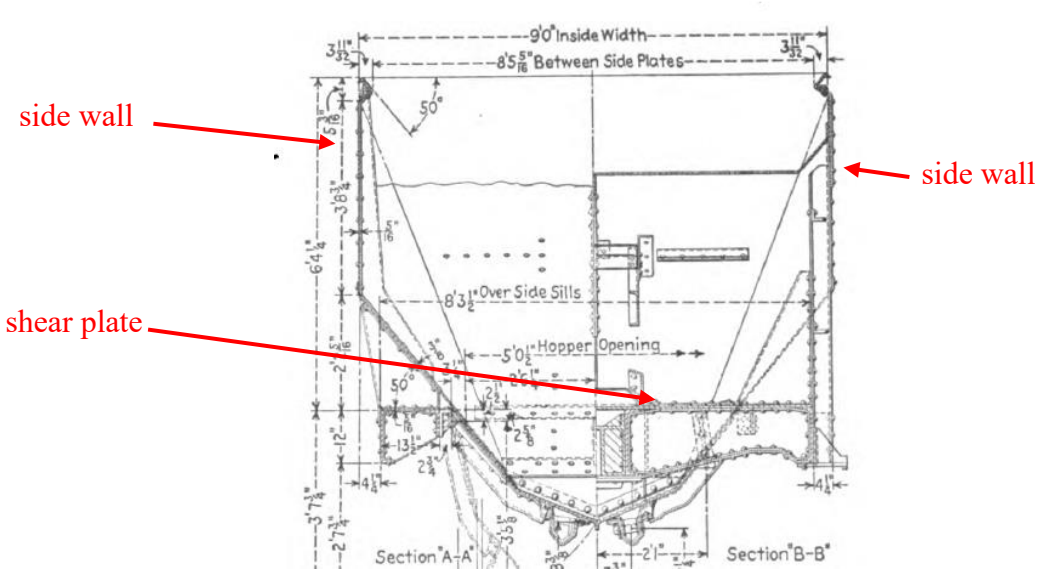


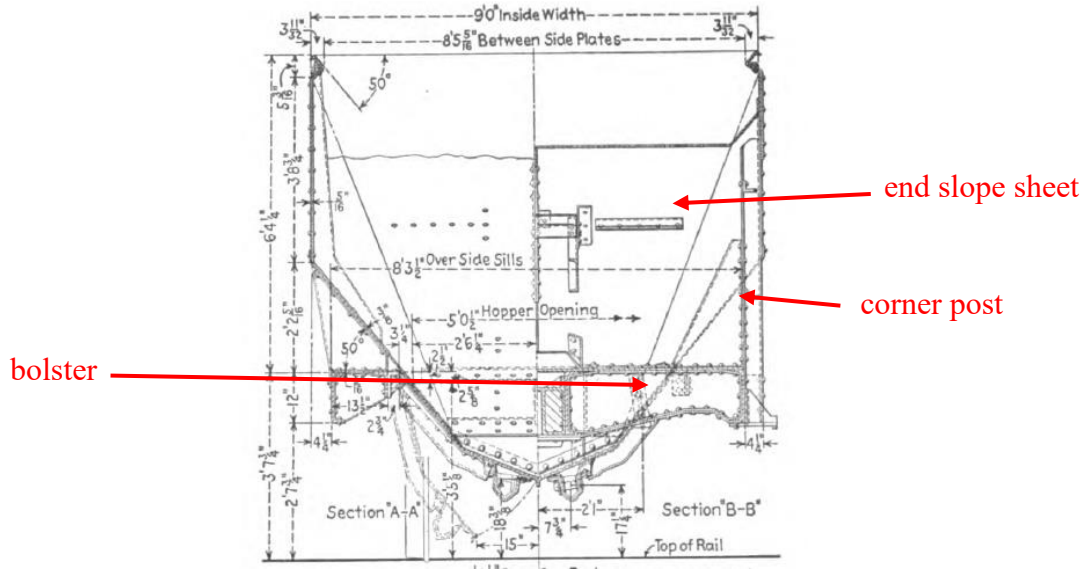
1946 Cyclopedia, Page 259

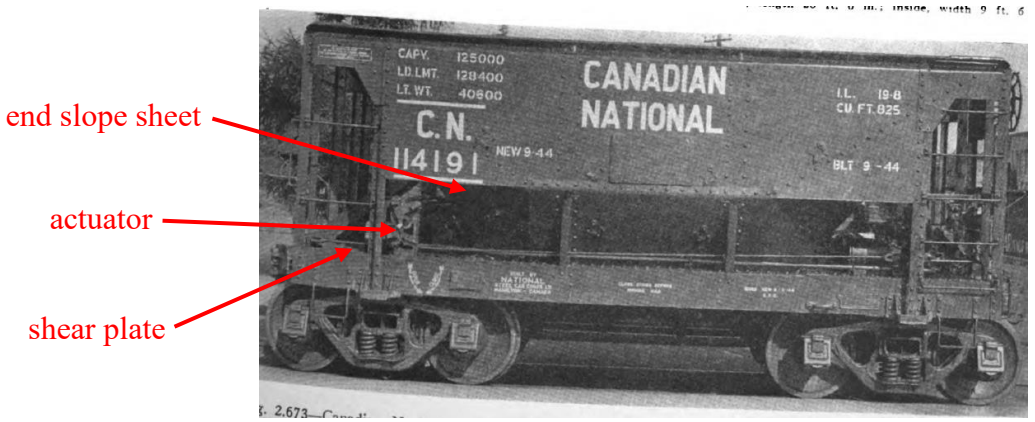


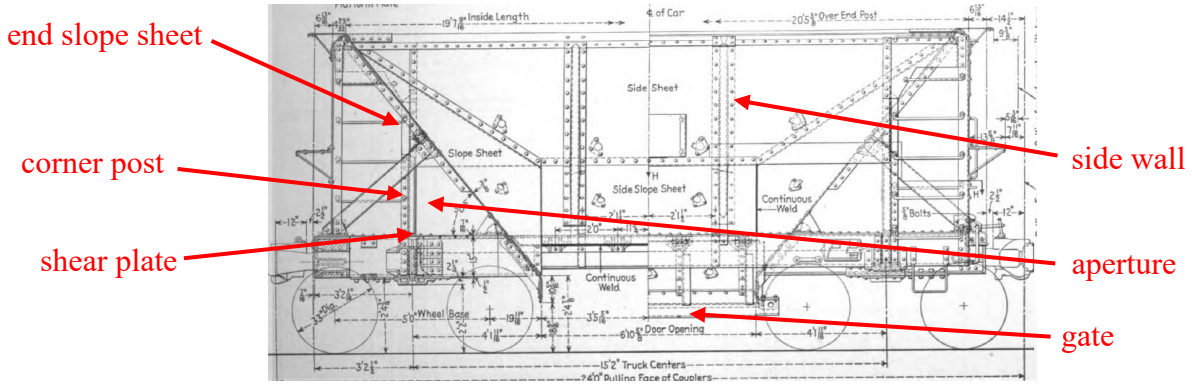
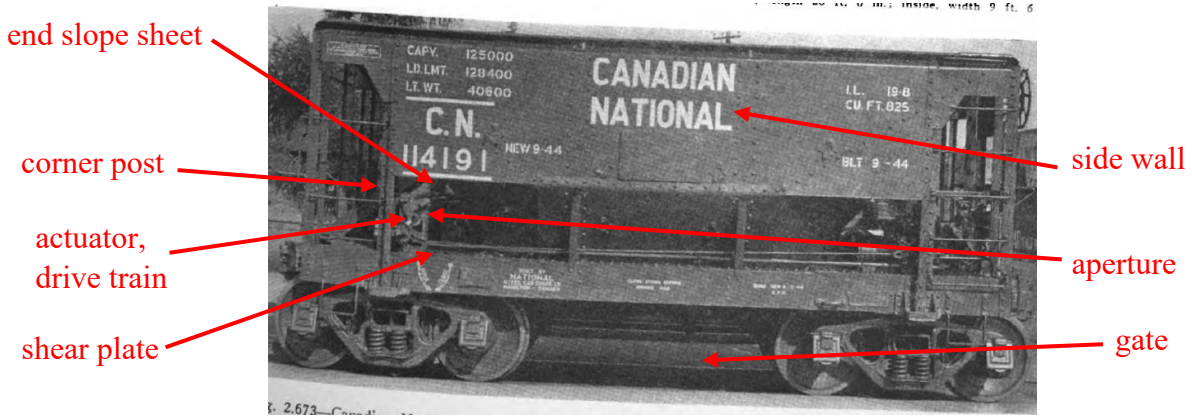
1946 Cyclopedia, Page 299

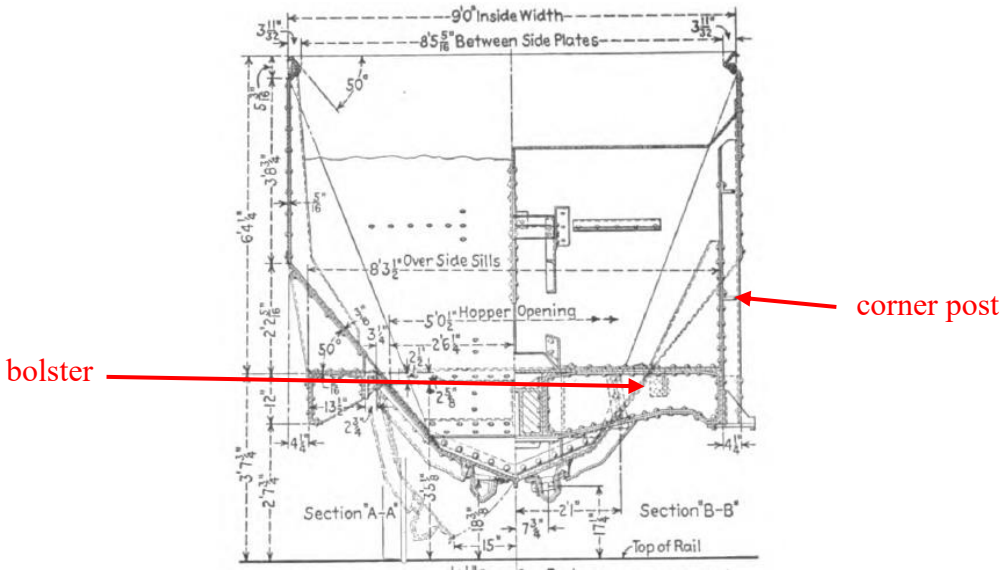
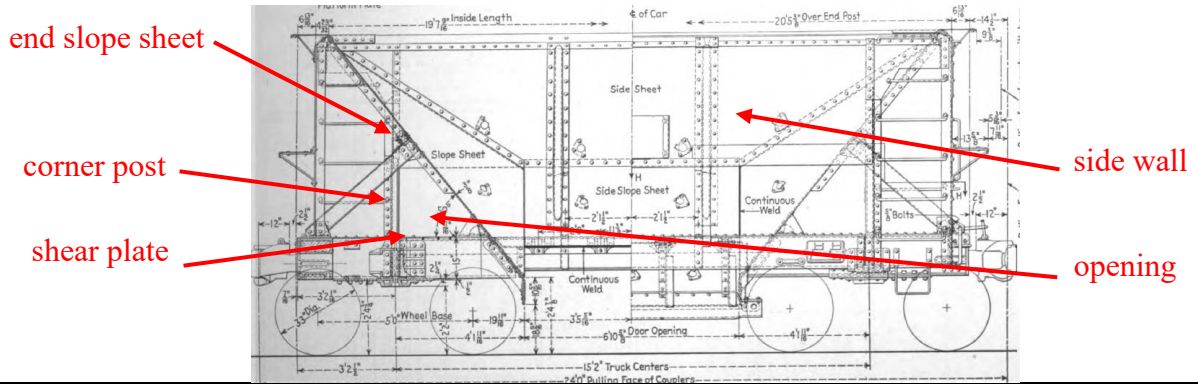
32j	said first end section being free of longitudinally oriented elephant ears extending upwardly of said draft sill webs of said draft sill to meet said first end slope sheet; and	*See* limitation 7g. The NSC 50-Ton Ore Car discloses this limitation at least on page 294 of the 1946 Cyclopedia. 16 end slope sheet draft sill 

32k	said hopper car having a second beam extending cross-wise between said first and second side walls, said second beam being a beam of hollow section; and said second beam being connected to said shear plate.	*See* limitation 7f. For the reasons discussed above in connection with the Enterprise 75-Ton Ore Car and limitation 7f, it would be obvious to modify the NSC 50-Ton Ore Car by adding the recited second hollow section beam, such that the car would disclose this limitation. 
33	The railroad hopper car of claim 32 wherein a third beam is mounted across said first end slope sheet intermediate said first and second beams.	*See* Claim 15. For the reasons discussed above in connection with the Enterprise 75-Ton Ore Car and Claim 15, it would be obvious to modify the NSC 50-Ton Ore Car by adding the recited third beam, such that the car would disclose the limitation of this claim.

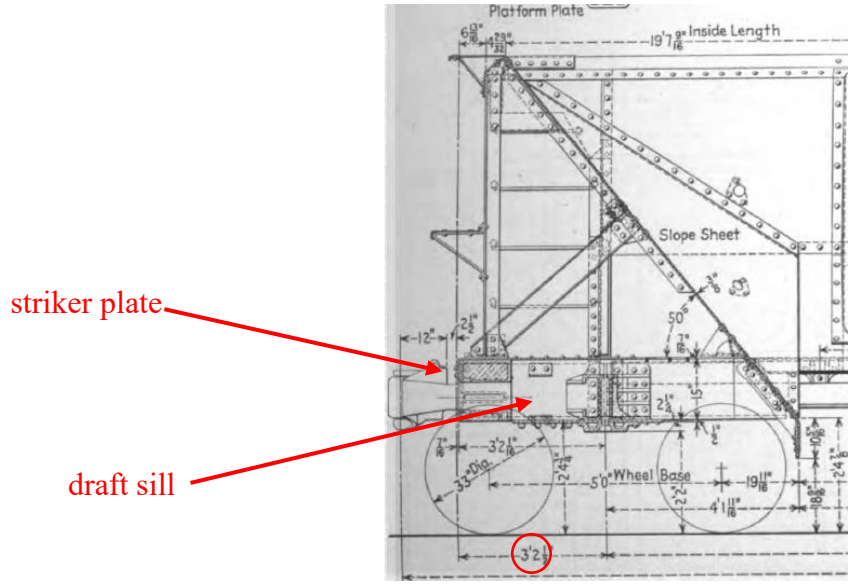
34	The railroad hopper car of claim 33 wherein said third beam is formed of a structural member mounted toes-in against said first end slope sheet to define an hollow section.	*See* Claim 16. For the reasons discussed above in connection with the Enterprise 75-Ton Ore Car and Claim 16, it would be obvious to form the third beam in the NSC 50-Ton Ore Car by mounting a bracket-type beam "toes-in" against the shear plate to define a hollow section, such that the NSC 50-Ton Ore Car would disclose the limitation of this claim.
35	The railroad hopper car of claim 32 wherein: said main bolster has first and second ends; and respective first and second corner posts are mounted to said first and second ends of said main bolster and extend upwardly therefrom to meet said first end slope sheet.	*See* limitation 1h. The NSC 50-Ton Ore Car discloses this limitation at least on page 294 of the 1946 Cyclopedia. 

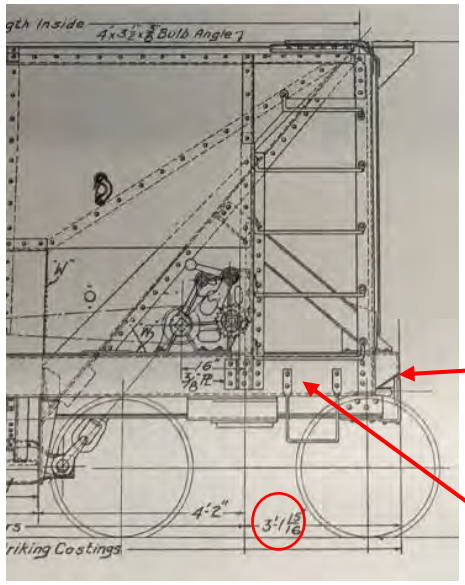
36	The railroad hopper car of claim 35 wherein: a machinery space is defined above said shear plate and under said first end slope sheet; and a door actuator is mounted above said shear plate and under said first end slope sheet.	*See* Claim 21. The NSC 50-Ton Ore Car discloses the limitation of this claim at least on page 295 of the 1946 Cyclopedia. 

37	The railroad hopper car of claim 35 wherein: a machinery space is defined above said shear plate and under said first end slope sheet; said first side wall has an aperture formed therein in a location that is longitudinally inboard of said first corner post, above said shear plate, and leeward of said first end slope sheet; said hopper has a movable gate operable to govern egress of lading from said hopper; there is an actuator mounted in said machinery space, and a drive train connecting said actuator to said gate.	*See* Claims 21 & 22. The NSC 50-Ton Ore Car discloses the limitation of this claim at least on pages 294 and 295 of the 1946 Cyclopedia.  

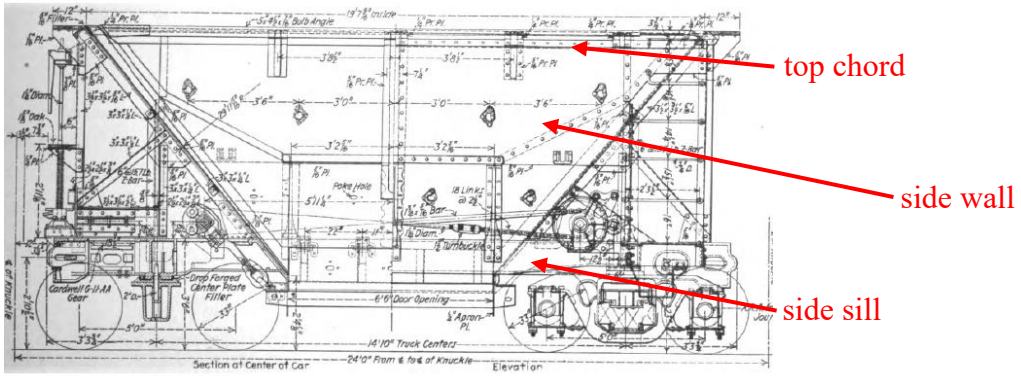
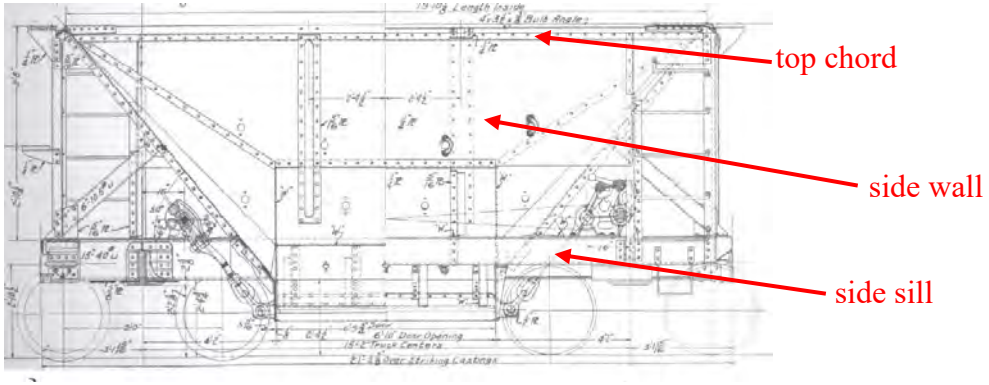
38a	The railroad hopper car of claim 32 wherein: said main bolster has first and second ends; and respective first and second corner posts are mounted to said first and second ends of said main bolster and extend upwardly therefrom;	*See* limitation 1h. The NSC 50-Ton Ore Car discloses this limitation on at least page 294 of the 1946 Cyclopedia. 
38b	said first side wall has an opening formed therein, said opening being located longitudinally inboard of said first corner post, upward of said shear plate, leeward of said first end slope sheet.	*See* limitation 23. The NSC 50-Ton Ore Car discloses this limitation on at least page 294 of the 1946 Cyclopedia. 

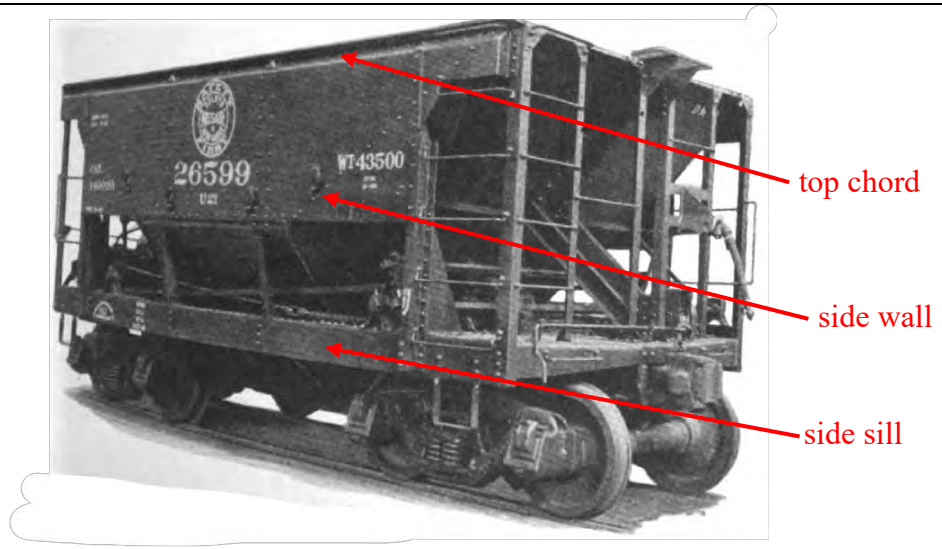
The NSC 50-Ton Ore Car discloses this limitation on at least page 294 of the 1946 Cyclopedia.

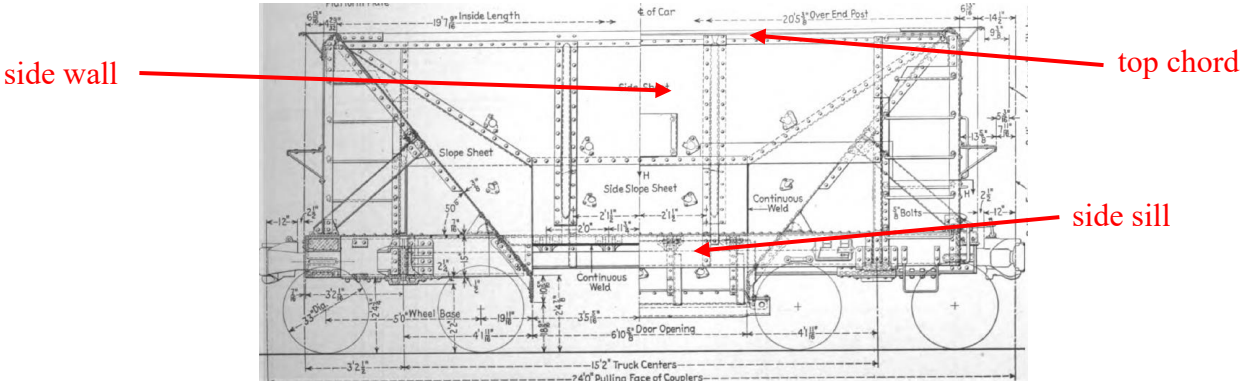


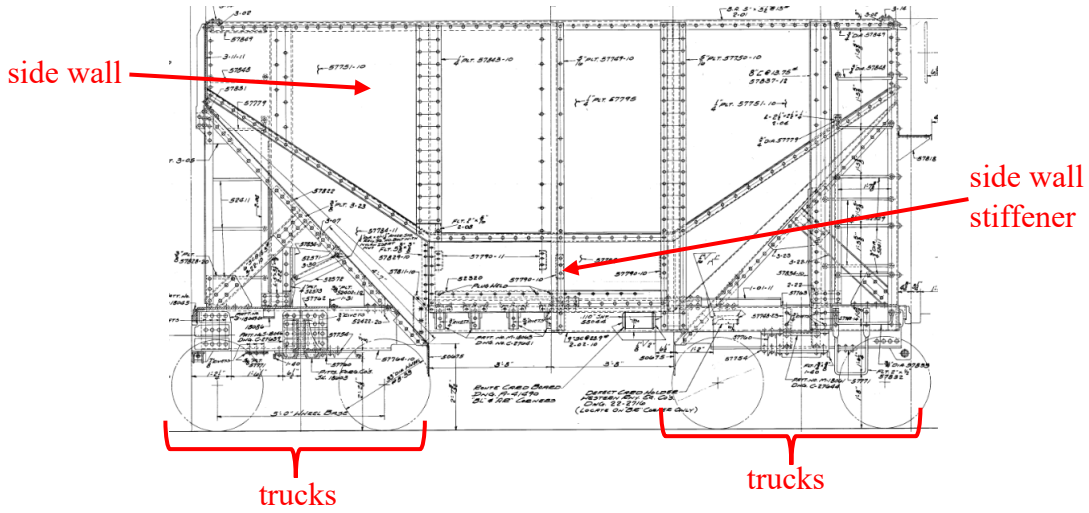
		The Pressed Steel DM&IR Ore Car discloses this limitation, at least on page 290 of the 1946 Cyclopedia. 

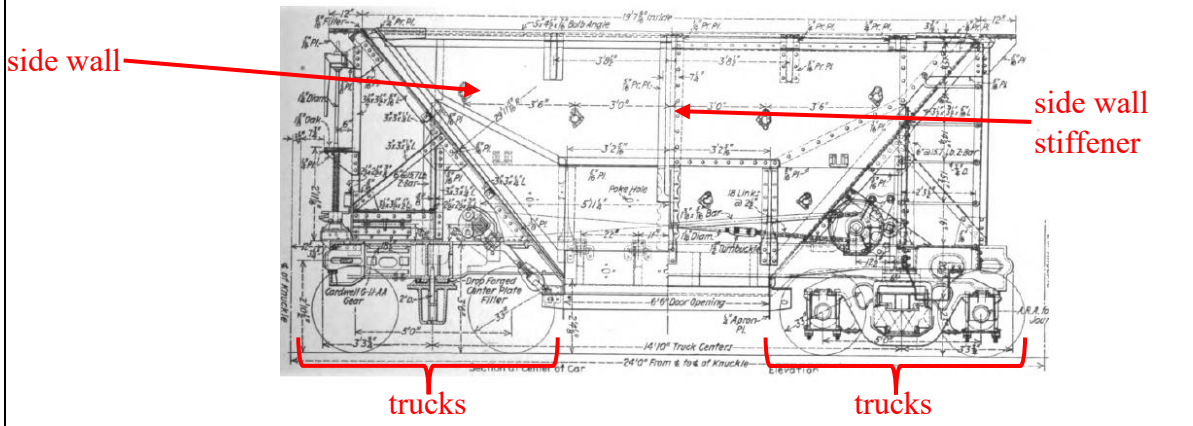
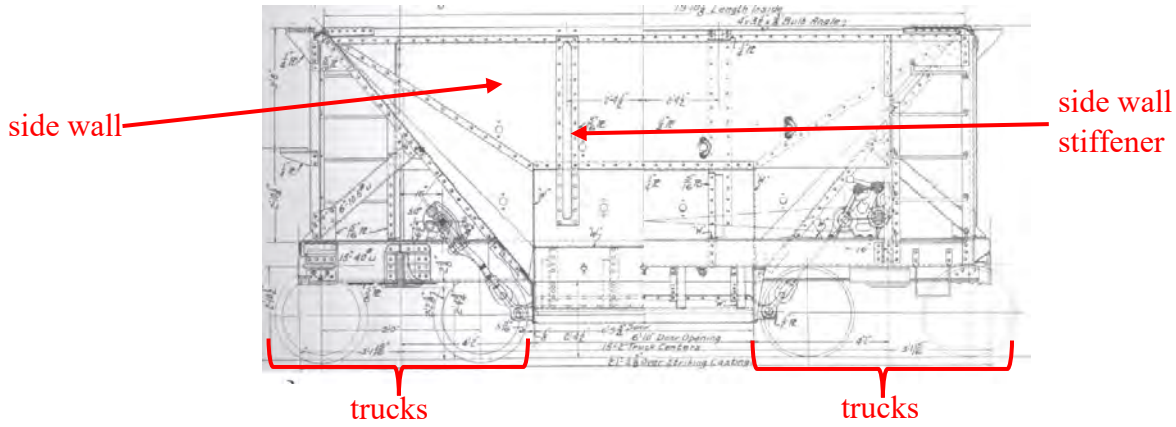
		The Hart Patent teaches a draft sill with a longitudinally outboard end at least in Figure 1. As discussed above, the Hart Patent discloses a striker at the end of its draft sill, and even without this disclosure it would have been obvious to use this standard feature. In addition, it would have been obvious to make the Hart car shorter, with the result that it would have the recited distance between truck center and striker, as disclosed by the Enterprise 75-Ton Ore Car, the Bethlehem Steel L.S.& I. Ore Car, the NSC 50-Ton Ore Car and the Pressed Steel DM&IR Ore Car. A POSITA would have understood that hopper cars should be made shorter to accommodate denser forms of lading, so a POSITA wishing to use Hart's hopper car for denser lading, such as ore, would have known to make the car shorter as in the ore cars listed above.
40a	The railroad hopper car of claim 32 wherein said railroad hopper car has first and second end section, and said hopper is carried thereby;	*See* limitation 32a.

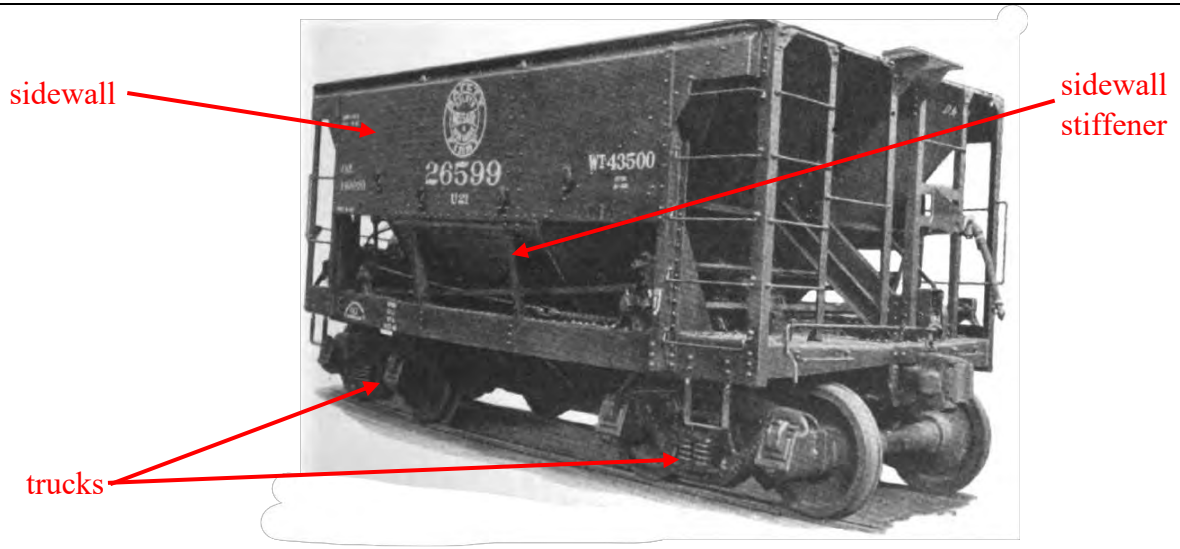
		The Pressed Steel DM&IR Ore Car and the Enterprise 75-Ton Ore Car disclose this limitation at least on pages 290, 292, and 299 of the 1946 Cyclopedia. Pressed Steel DM&IR Ore Car  Enterprise 75-Ton Ore Car 


26599
WT-43500
top chord
side wall
side sill

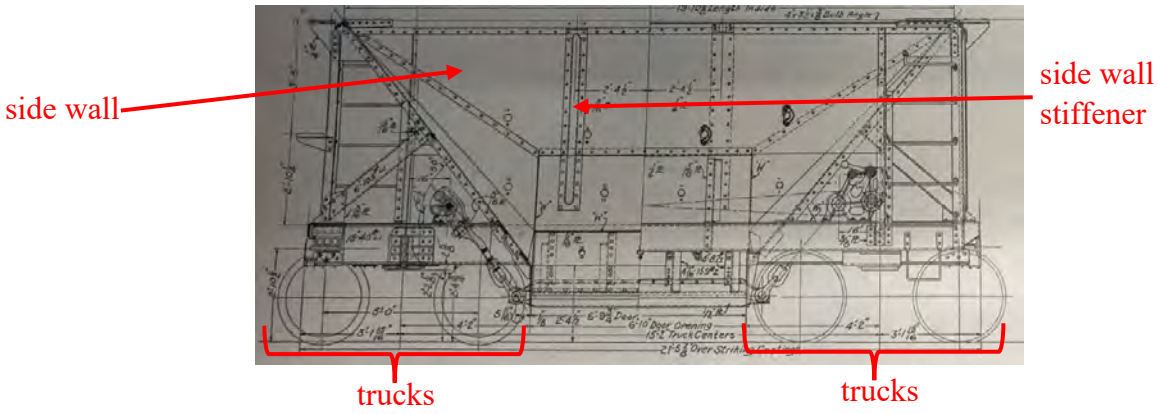
		The NSC 50-Ton Ore Car discloses this limitation at least on page 294 of the 1946 Cyclopedia. 

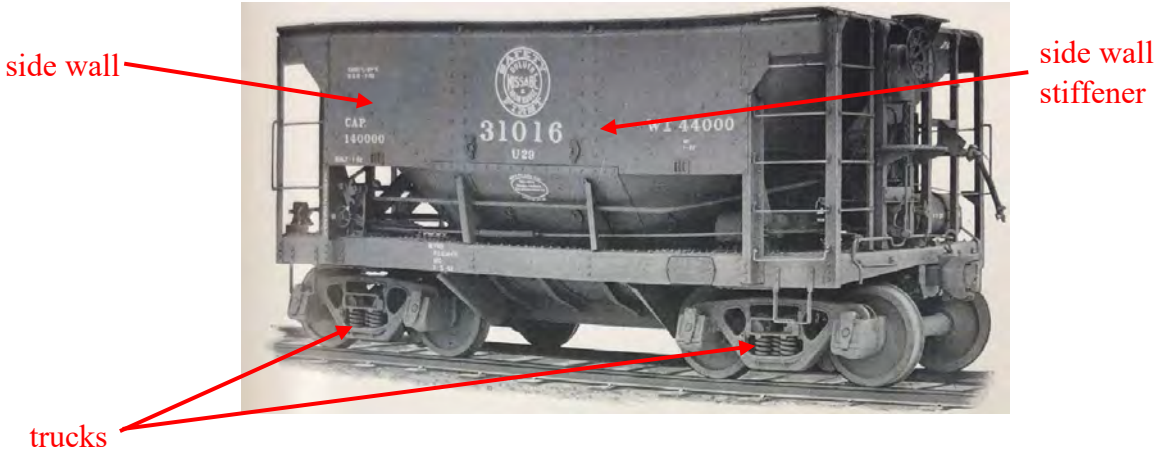
40c	said first side wall has a predominantly upwardly running side wall stiffener mounted thereto, said side wall stiffener being located at a longitudinal station intermediate the trucks;	The Bethlehem Steel L.S.&I. Ore Car practiced this limitation. 

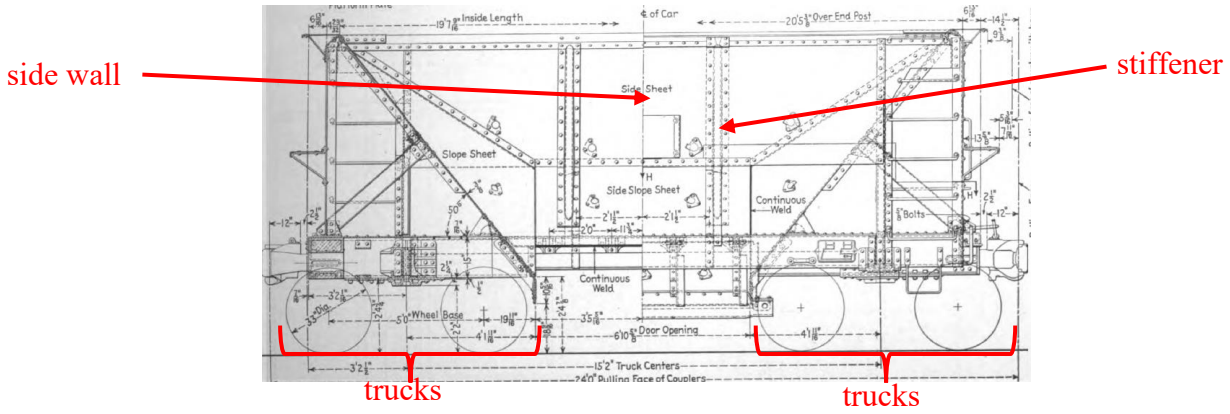
		The Pressed Steel DM&IR Ore Car and the Enterprise 75-Ton Ore Car disclose this limitation at least on pages 290, 292, and 299 of the 1946 Cyclopedia. Pressed Steel DM&IR Ore Car  Enterprise 75-Ton Ore Car 

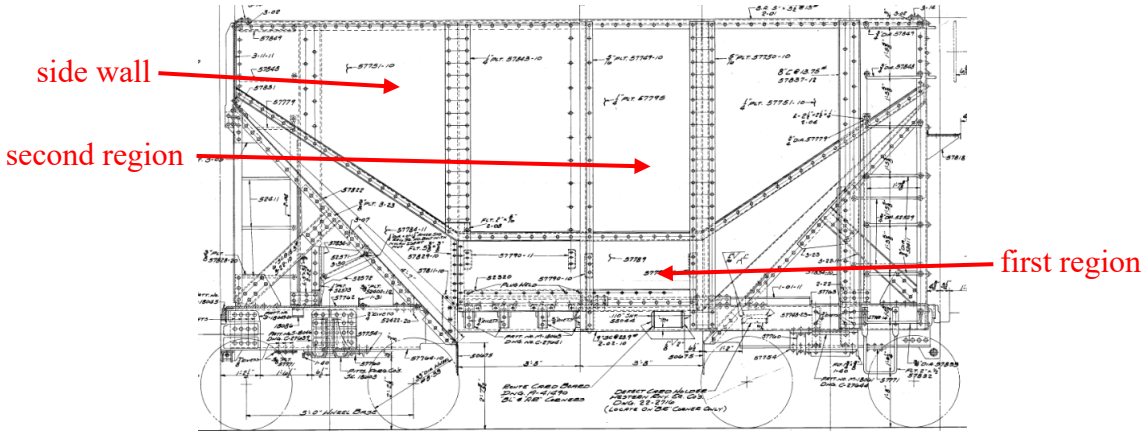

sidewall
sidewall stiffener
trucks
26599
WT-43500

The Enterprise 75-Ton Ore Car discloses this limitation at least on pages 238 and 239 of the 1953 Cyclopedia.



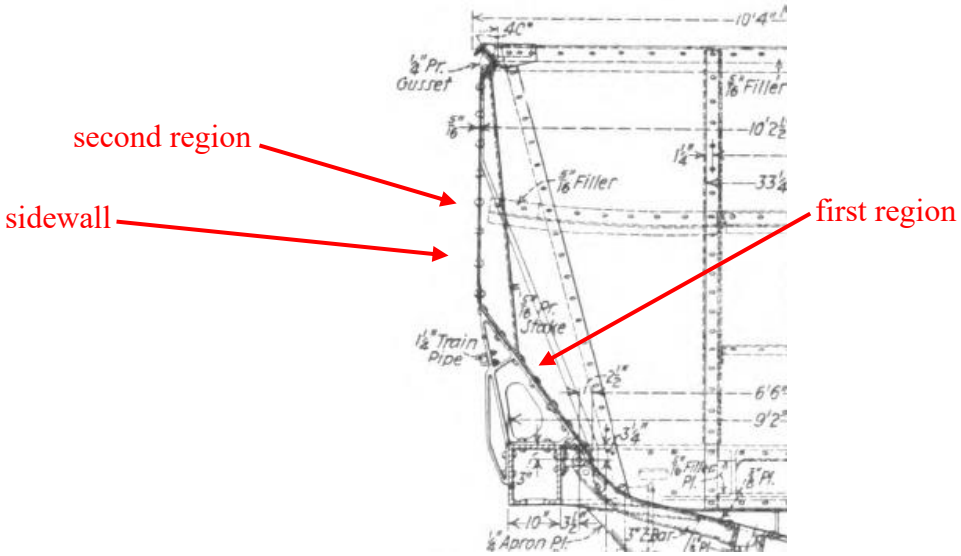


		The NSC 50-Ton Ore Car discloses this limitation at least on page 294 of the 1946 Cyclopedia. 

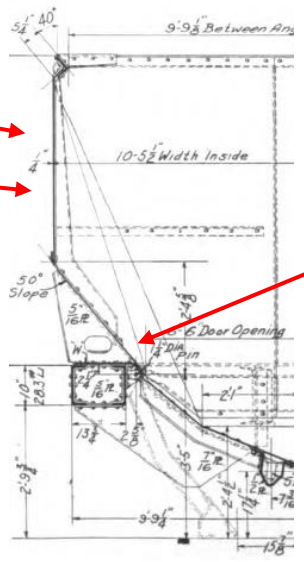
40d	said first side wall having a first region, said first region being a lower region thereof; said first side wall having a second region, said second region being an upper region thereof;	The Bethlehem Steel L.S.&I. Ore Car practiced this limitation. 

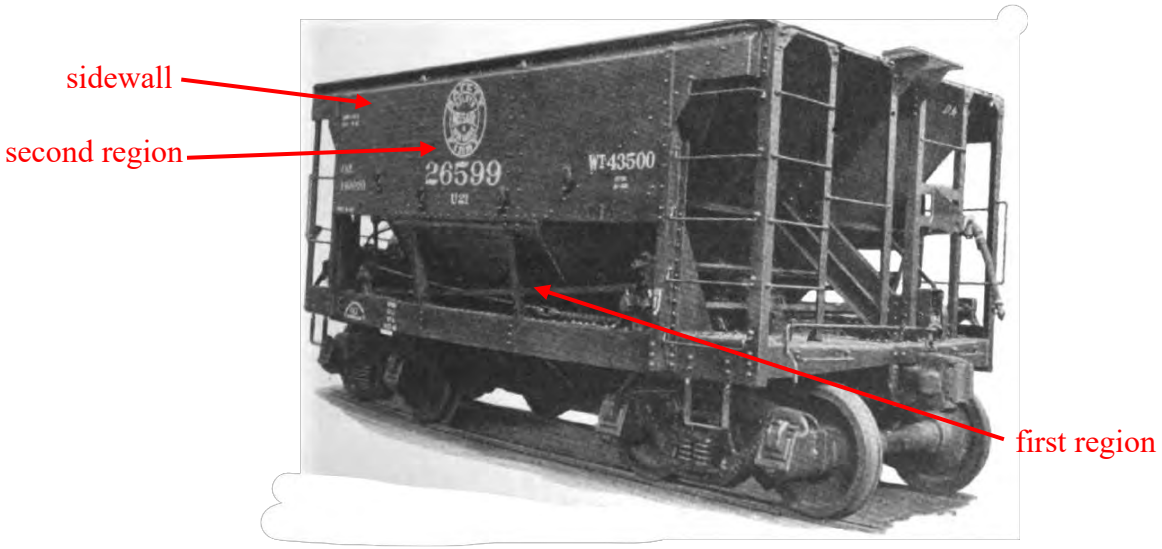
The Pressed Steel DM&IR Ore Car and the Enterprise 75-Ton Ore Car disclose this limitation at least on pages 290, 292, and 299 of the 1946 Cyclopedia.

Pressed Steel DM&IR Ore Car

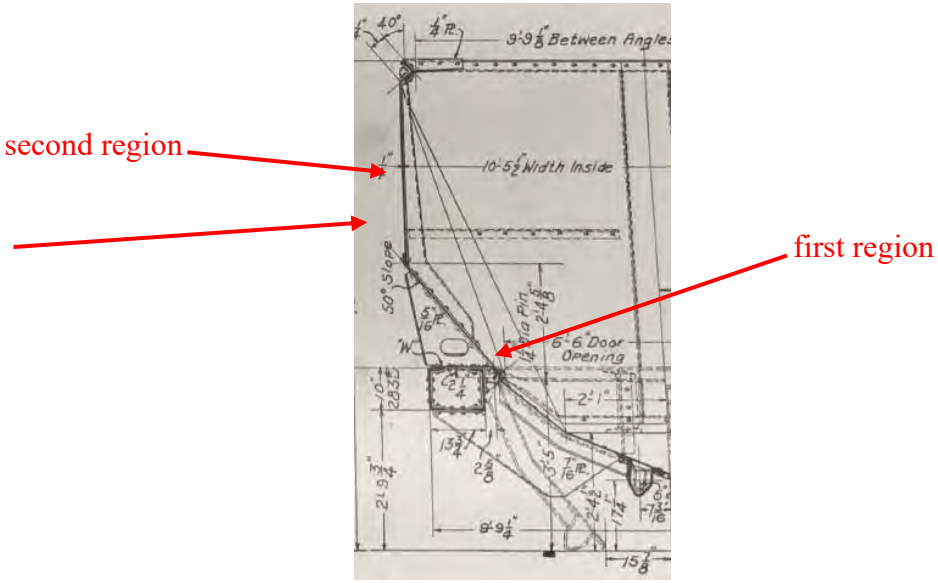


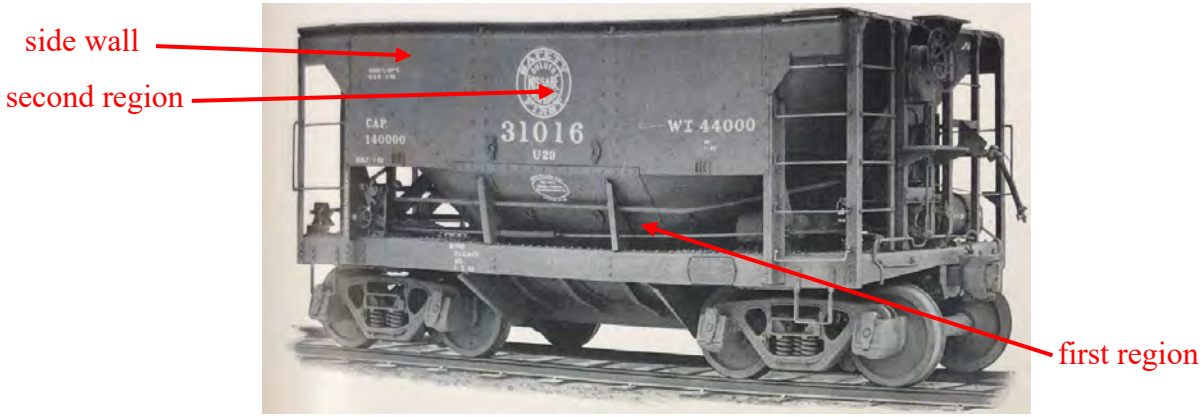
Enterprise 75-Ton Ore Car

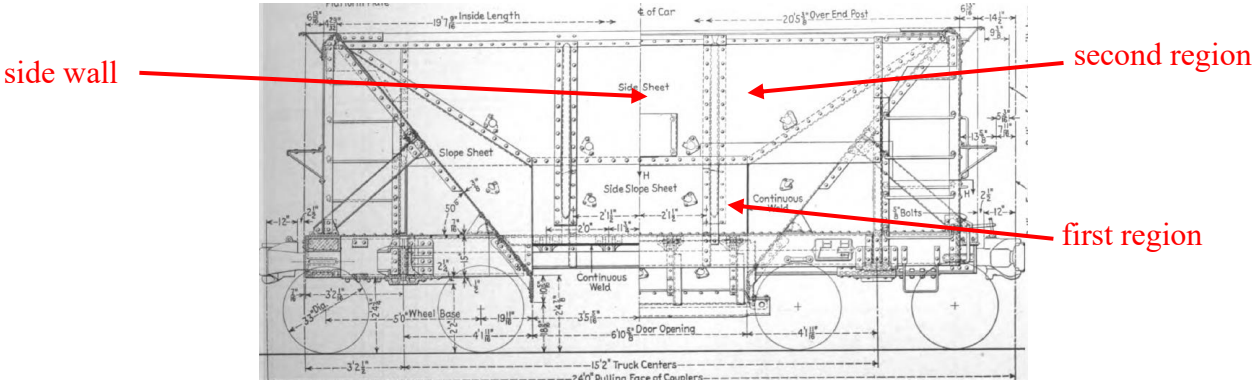


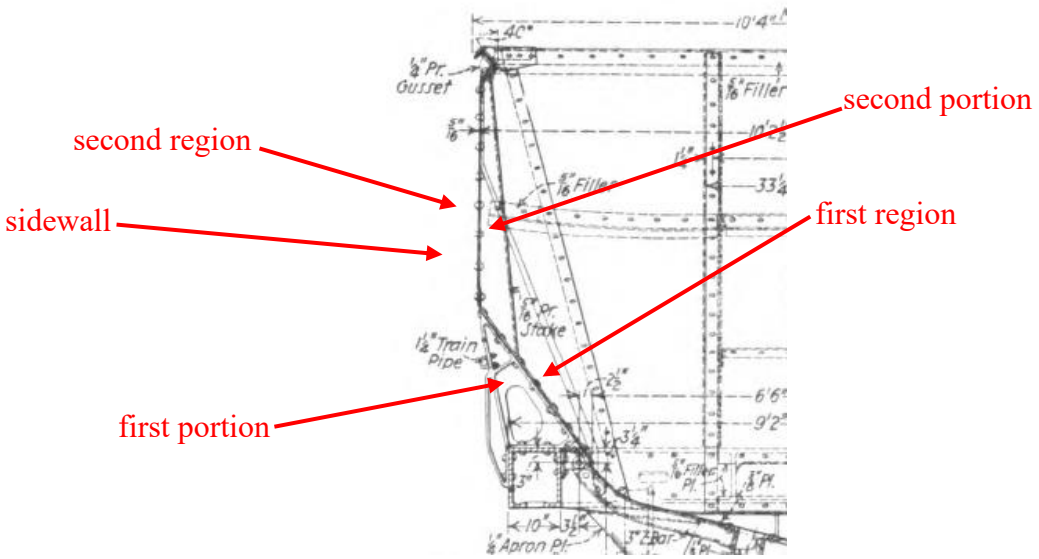


The Enterprise 75-Ton Ore Car discloses this limitation at least on pages 238 and 239 of the 1953 Cyclopedia.

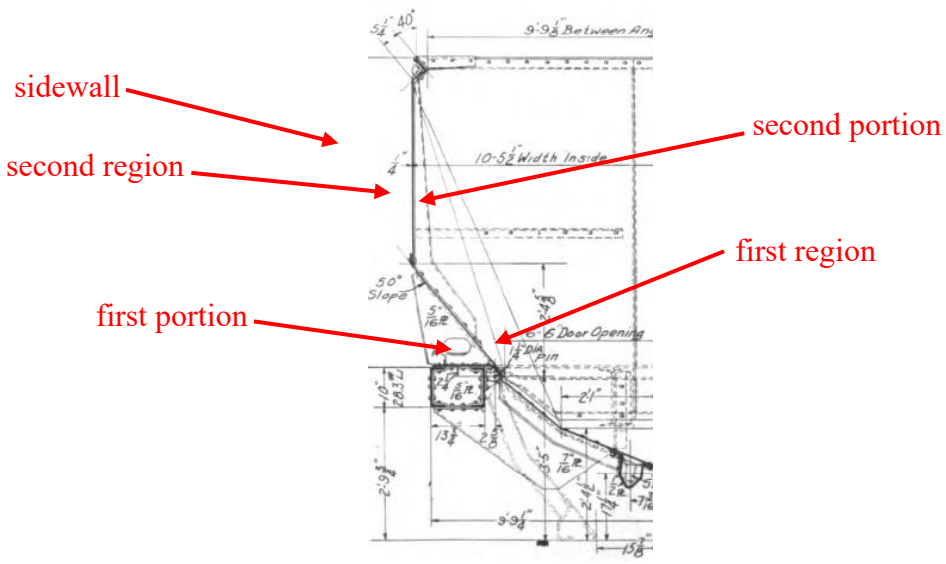


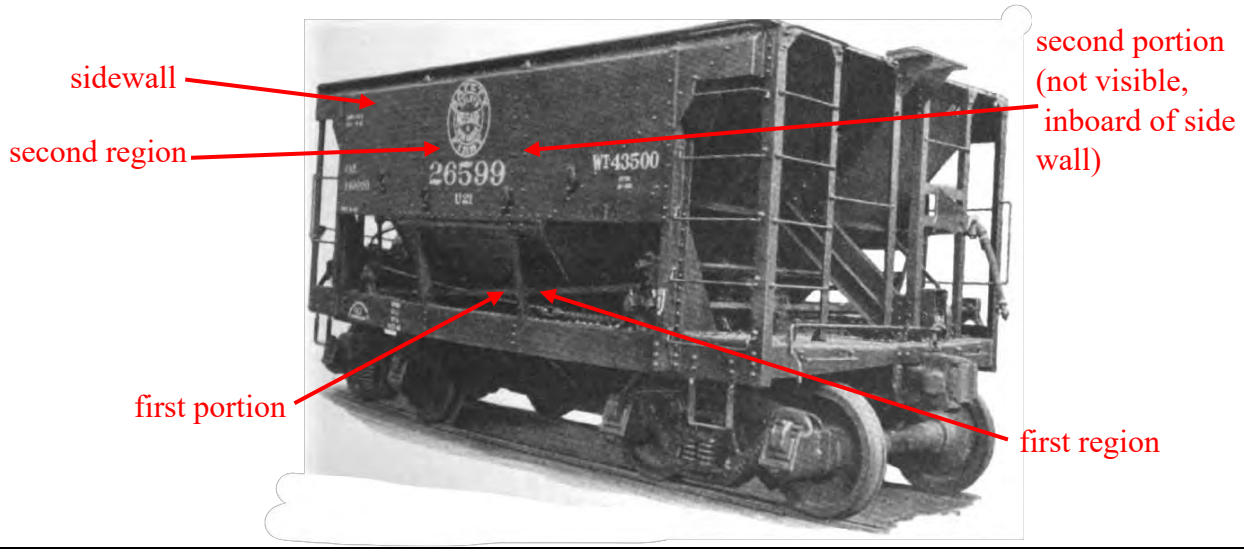


		The NSC 50-Ton Ore Car discloses this limitation at least on page 294 of the 1946 Cyclopedia. 

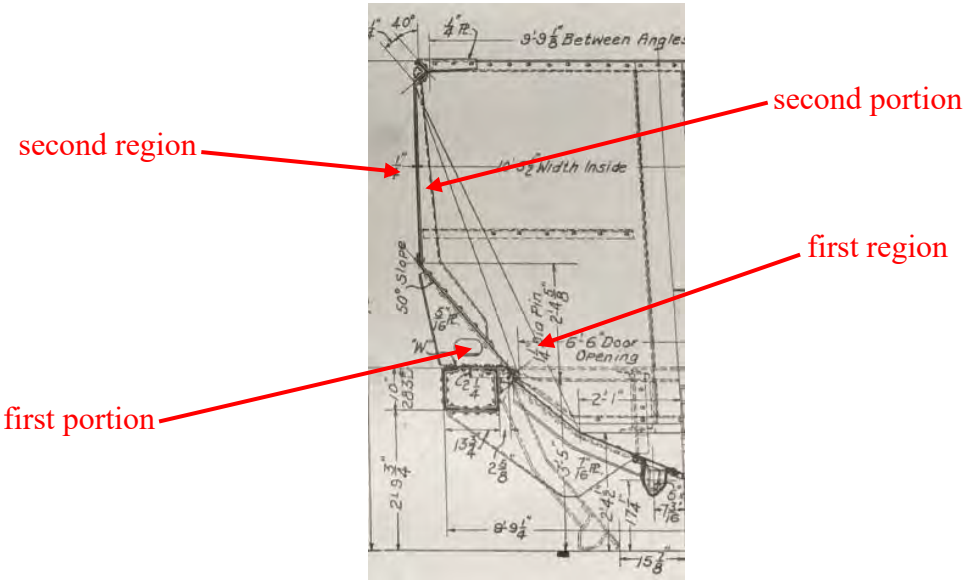
40e	said side wall stiffener having a first portion, said first portion being a lower portion thereof; said first portion being mounted to said first region of said first side wall; said side wall stiffener having a second portion, said second portion being an upper portion thereof, said second portion being mounted to said second region of said side wall;	The Pressed Steel DM&IR Ore Car and the Enterprise 75-Ton Ore Car disclose this limitation at least on pages 290, 292, and 299 of the 1946 Cyclopedia. Pressed Steel DM&IR Ore Car 

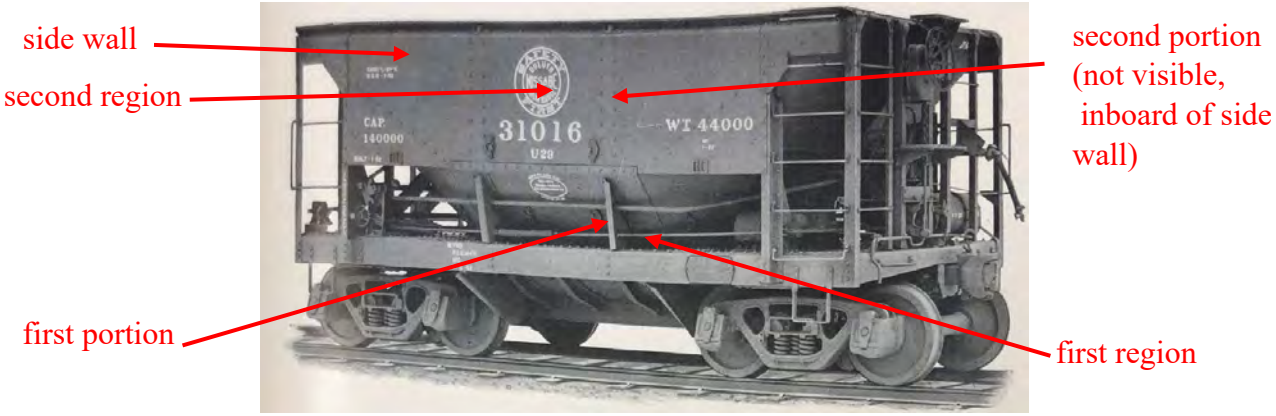
Enterprise 75-Ton Ore Car



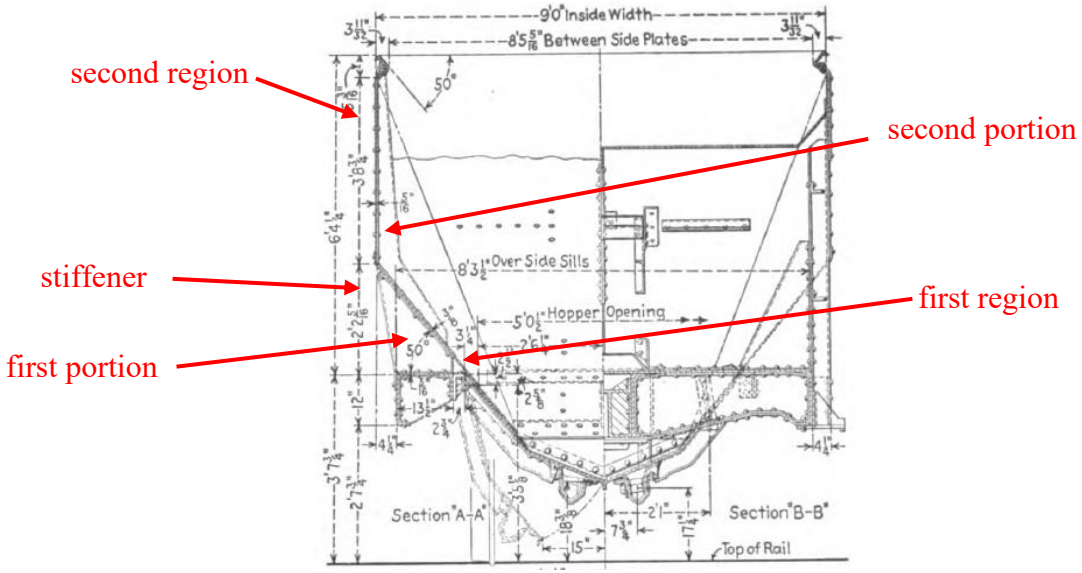


The Enterprise 75-Ton Ore Car discloses this limitation at least on pages 238 and 239 of the 1953 Cyclopedia.



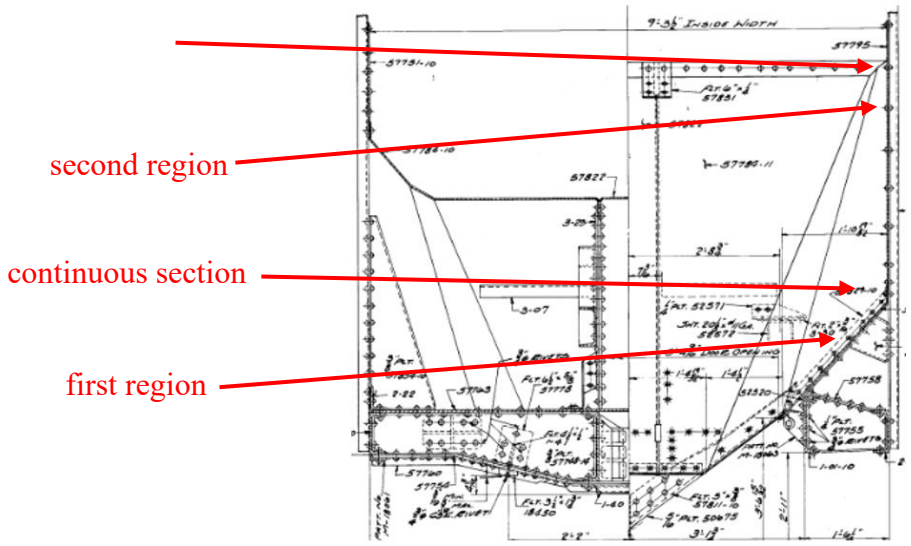


The NSC 50-Ton Ore Car discloses this limitation at least on page 294 of the 1946 Cyclopedia.



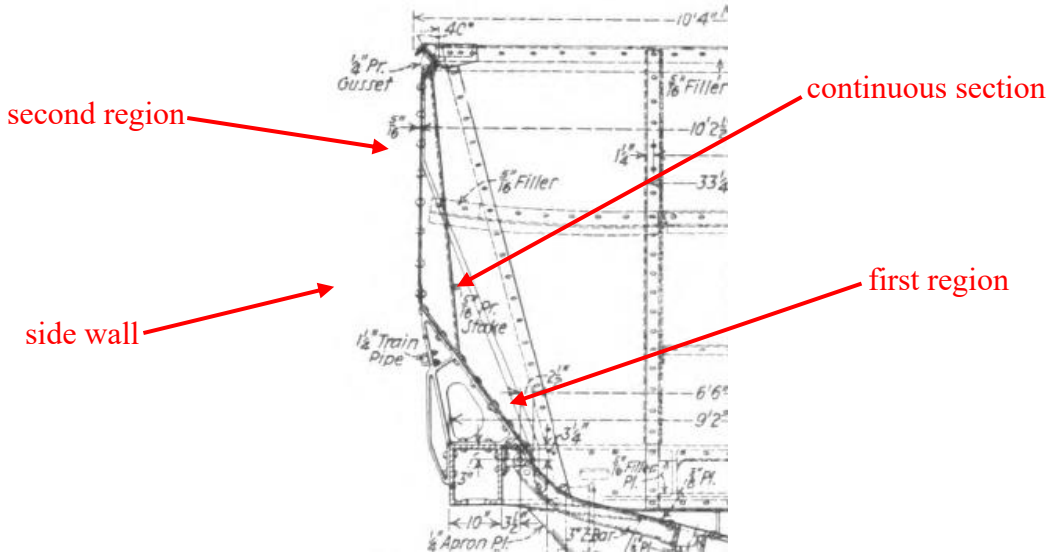
It would have been obvious to a person of skill in the art to replace the sidewall stiffeners in the Bethlehem Steel L.S.& I. Ore Car with the type of stiffeners used in the Pressed Steel DM&IR Ore Car, the Enterprise 75-Ton Ore Car, and the NSC 50-Ton Ore Car (shown below). A POSITA would have been motivated to do so because, *inter alia*, the type of stiffener in the three ore cars listed above was well-known to be effective and to maximize hopper capacity (as taught by the Gilpin Patent); and for the reasons discussed in connection with limitation 1g of the '892 Patent. The modified car would disclose limitation 40e.

40f	said first portion of said first side wall stiffener being laterally outboard of said first region of said first side wall; said second portion of said side wall stiffener being laterally inboard of said second region of said first side wall;	The Pressed Steel DM&IR Ore Car and the Enterprise 75-Ton Ore Car disclose this limitation at least on pages 290, 292, and 299 of the 1946 Cyclopedia; and the NSC 50-Ton Ore Car discloses this limitation at least on page 294 of the 1946 Cyclopedia. This is evident from the drawings and images shown above in connection with limitation 40e. Further, as also discussed above, it would have been obvious to modify the Bethlehem Steel L.S.&I. Ore Car to replace its sidewall stiffeners in the Bethlehem Steel car with the type of stiffeners used in the Pressed Steel DM&IR Ore Car, the Enterprise 75-Ton Ore Car, and the NSC 50-Ton Ore Car.

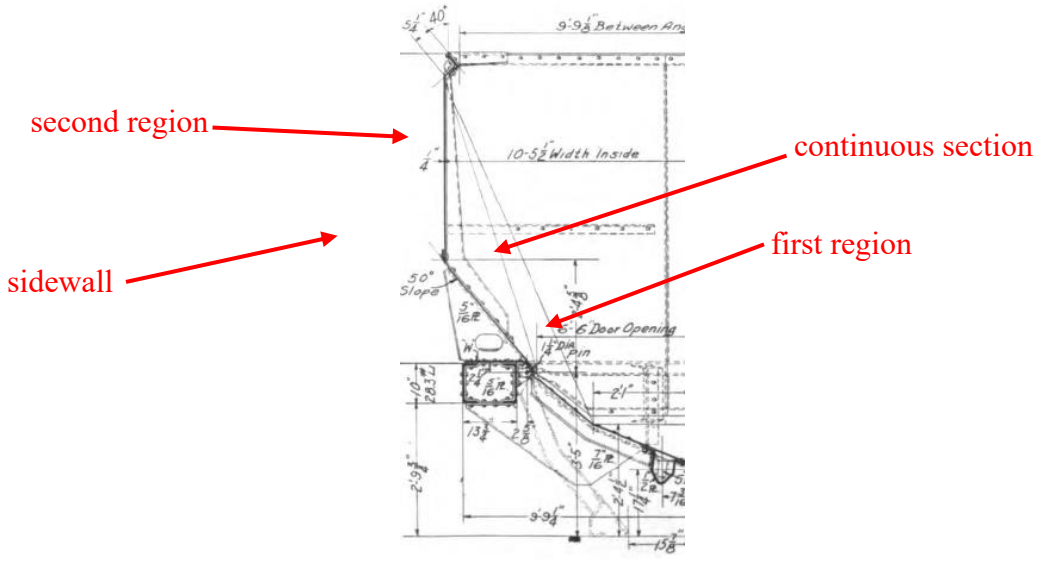
40g	said side wall having a continuous section between said first and second regions thereof; and	The Bethlehem Steel L.S.&I. Ore Car practiced this limitation. 

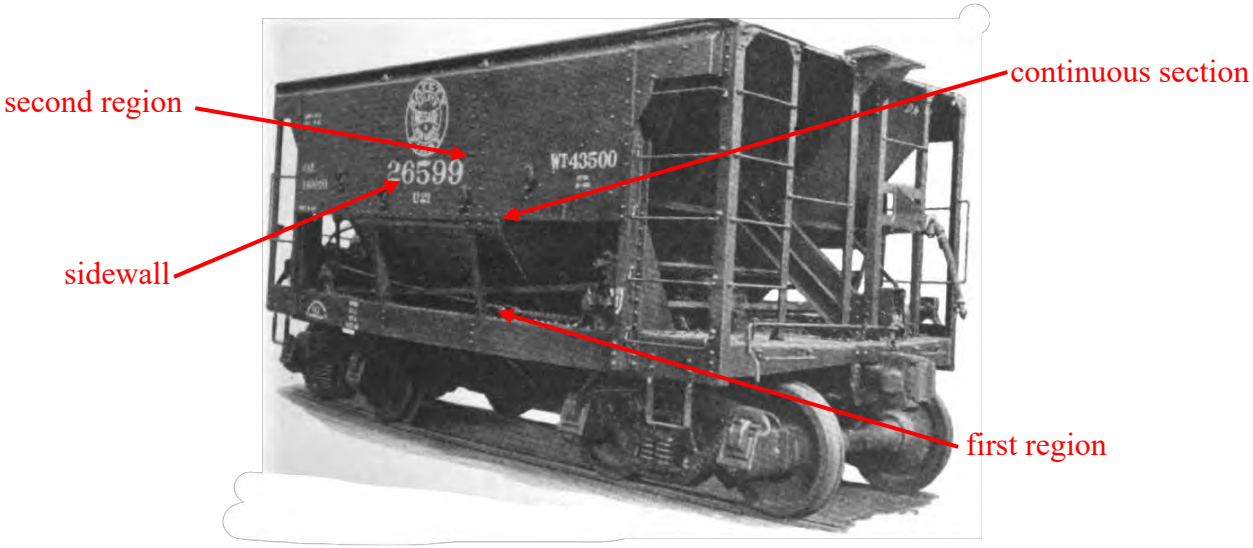
The Pressed Steel DM&IR Ore Car and the Enterprise 75-Ton Ore Car disclose this limitation at least on pages 290, 292, and 299 of the 1946 Cyclopedia.

Pressed Steel DM&IR Ore Car

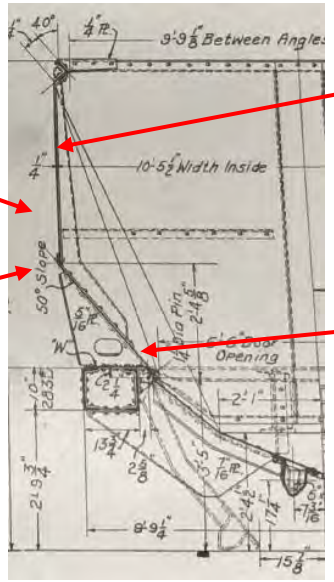


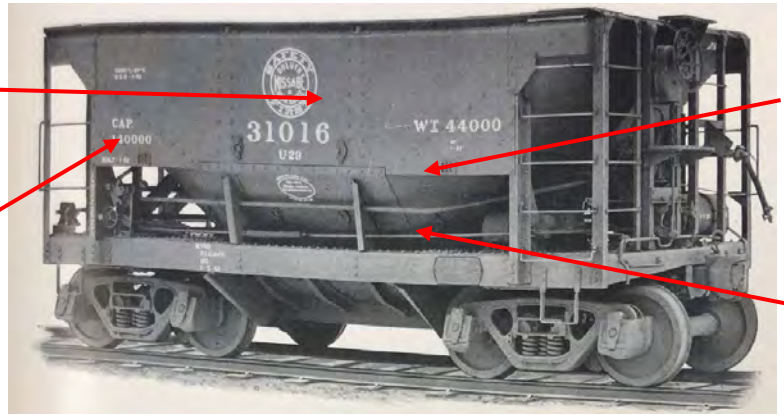
Enterprise 75-Ton Ore Car

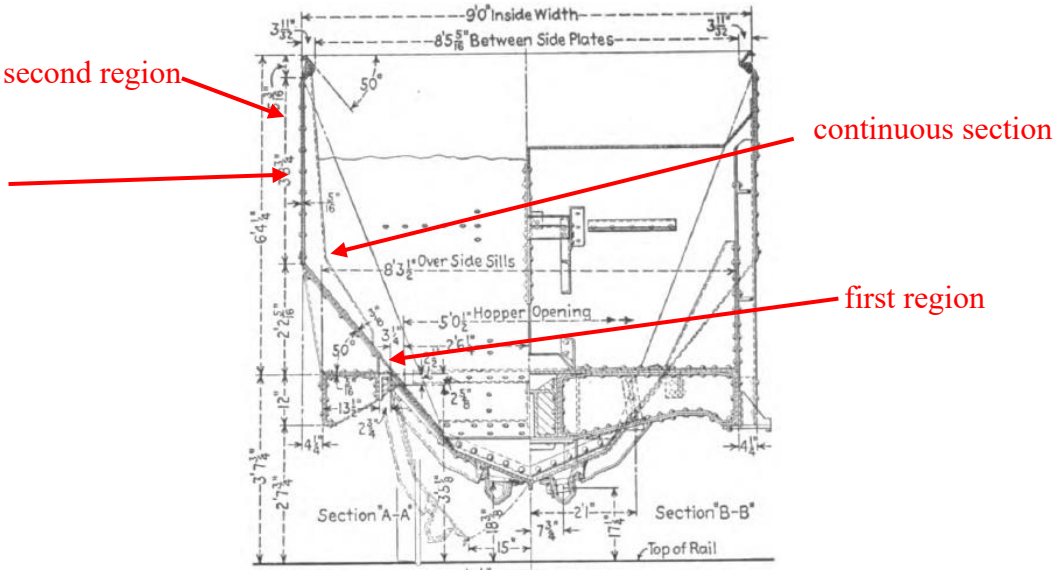


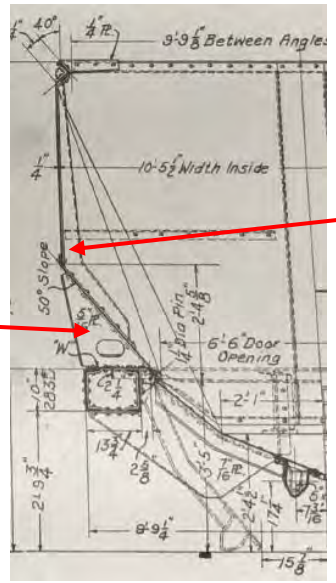


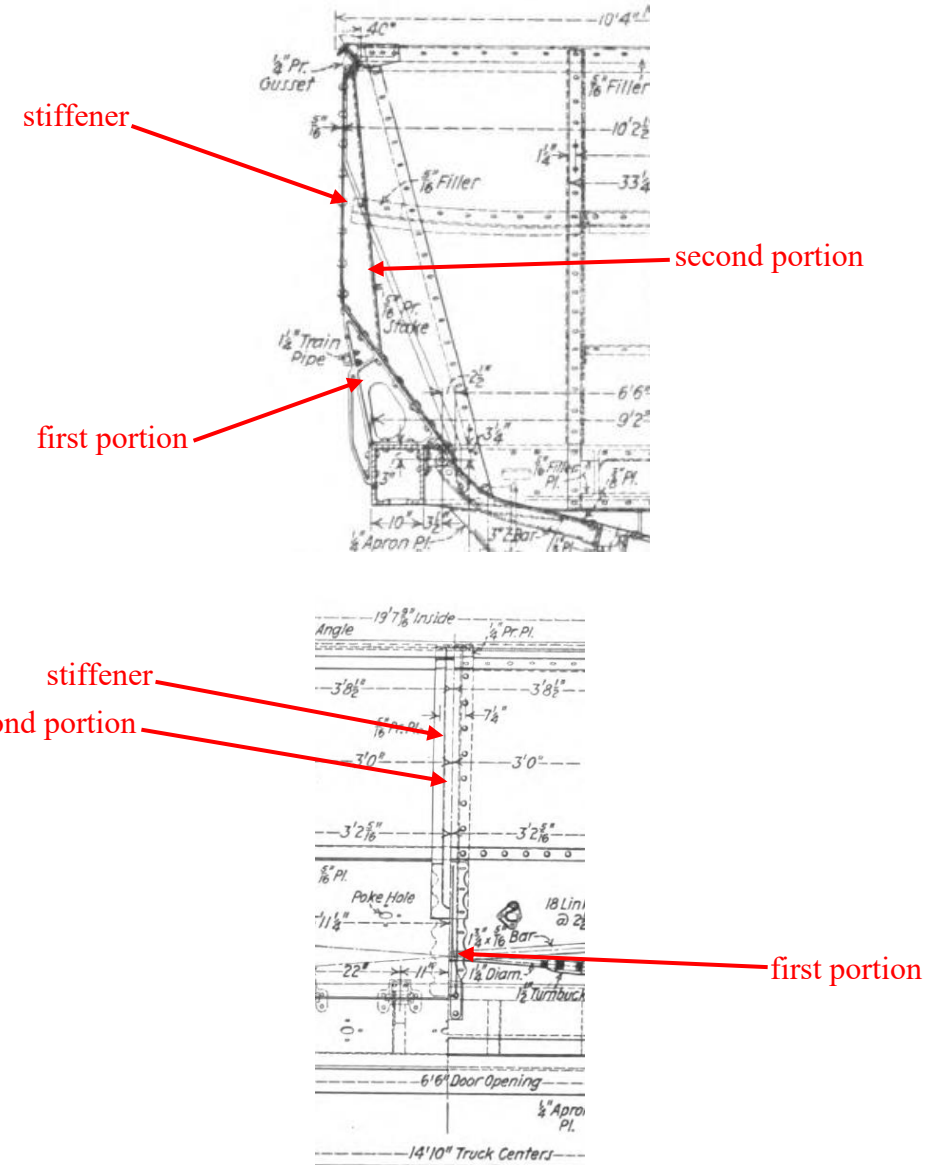
The Enterprise 75-Ton Ore Car discloses this limitation at least on pages 238 and 239 of the 1953 Cyclopedia.



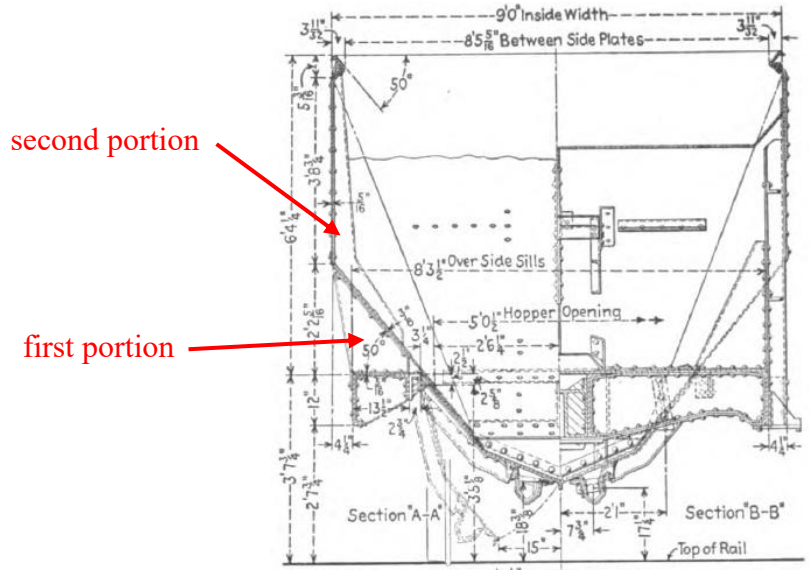


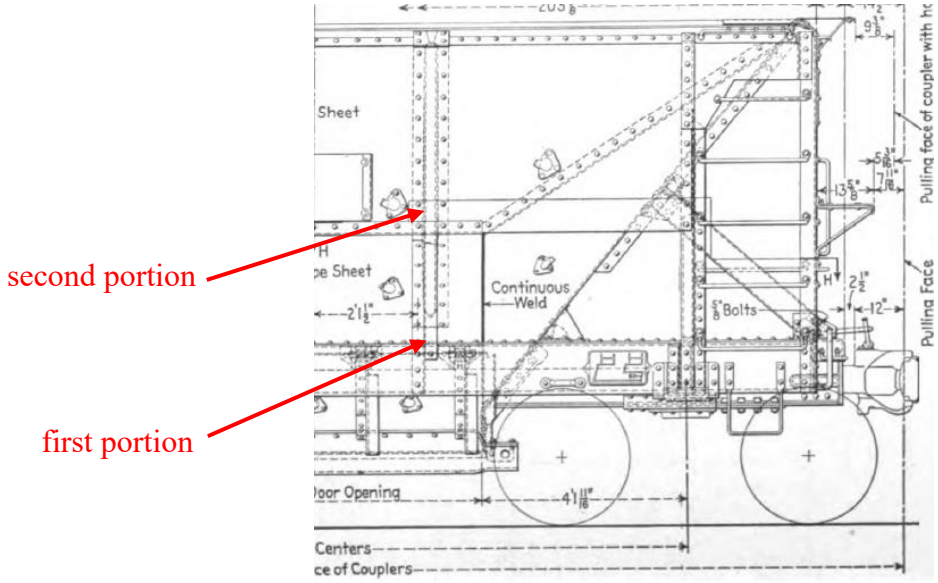
		The NSC 50-Ton Ore Car discloses this limitation at least on page 294 of the 1946 Cyclopedia. 

40h	said side wall stiffener having web continuity between said first and second portions thereof.	The Enterprise 75-Ton Ore Car shows this limitation at least on page 238 of the 1953 Cyclopedia. 

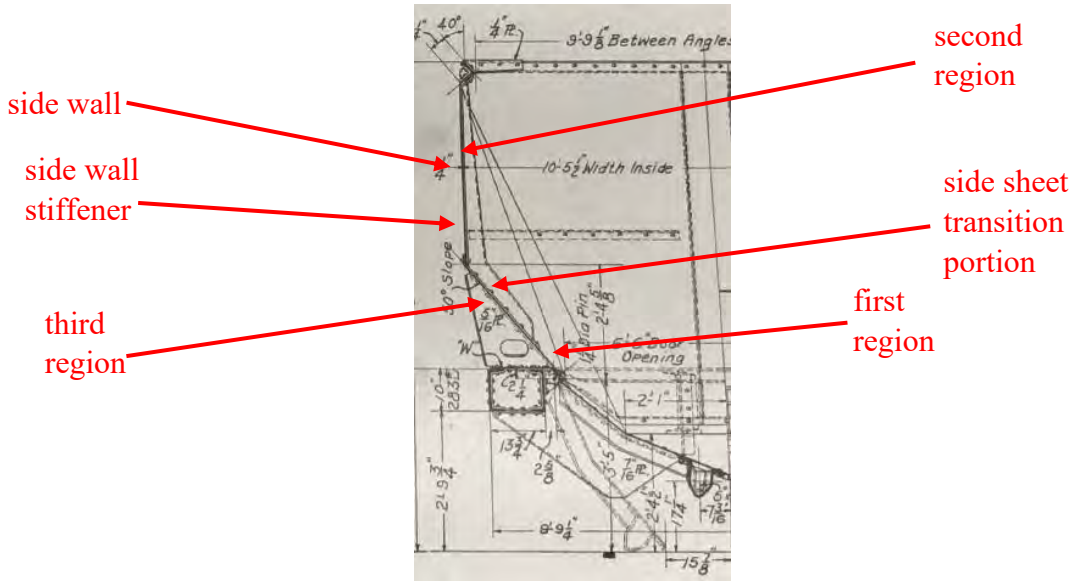
		The Pressed Steel DM&IR Ore Car discloses this limitation at least on page 290 of the 1946 Cyclopedia. 

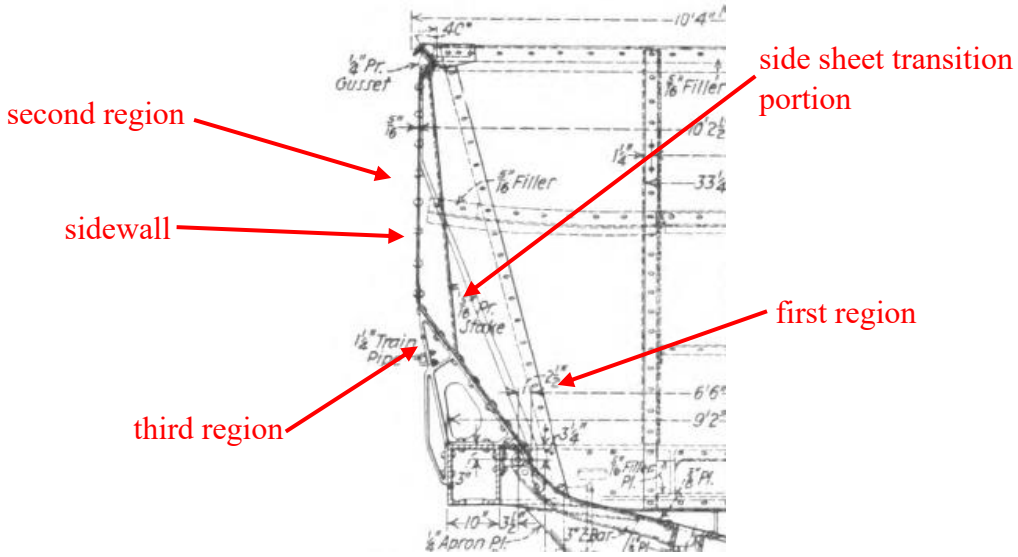
The NSC 50-Ton Ore Car discloses this limitation at least on page 294 of the 1946 Cyclopedia.



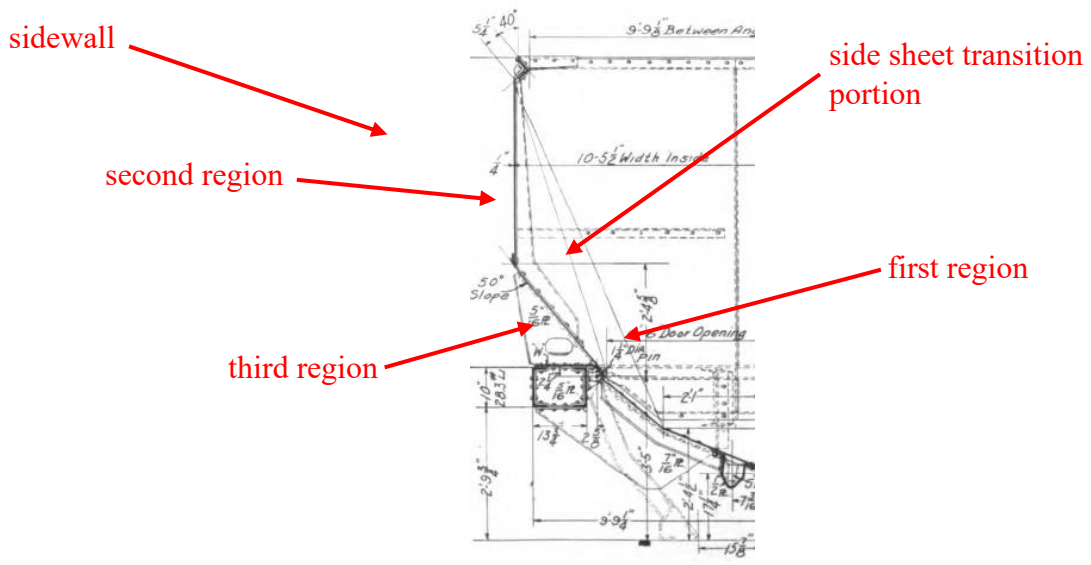


		As discussed above, it would have been obvious to modify the Bethlehem Steel L.S.&I. Ore Car to replace its sidewall stiffeners in the Bethlehem Steel car with the type of stiffeners used in the Pressed Steel DM&IR Ore Car, the Enterprise 75-Ton Ore Car, and the NSC 50-Ton Ore Car. The modified car would disclose limitation 40h.
41	The railroad hopper car of claim 40 wherein said first and second portions of said side wall stiffener are substantially co-planar, and are substantially vertically aligned when seen in a sectional view looking along the car.	*See* Claim 3 of the '892 Patent, particularly in connection with the Enterprise 75-Ton Ore Car.

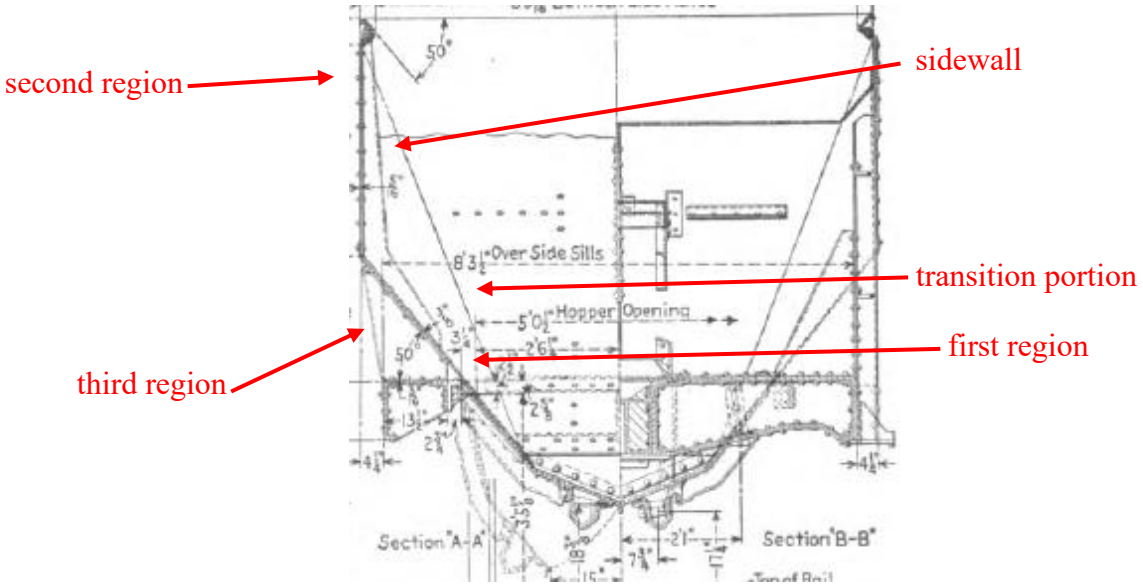
42	The railroad hopper car of claim 41 wherein said first side wall has a third region intermediate said first and second regions, said third region including a side sheet transition portion passing across said side wall stiffener from an inboard margin thereof to an outboard margin thereof, and said stiffener having vertical web continuity through said transition portion.	The Enterprise 75-Ton Ore Car discloses this limitation at least on page 238 of the 1953 Cyclopedia. 

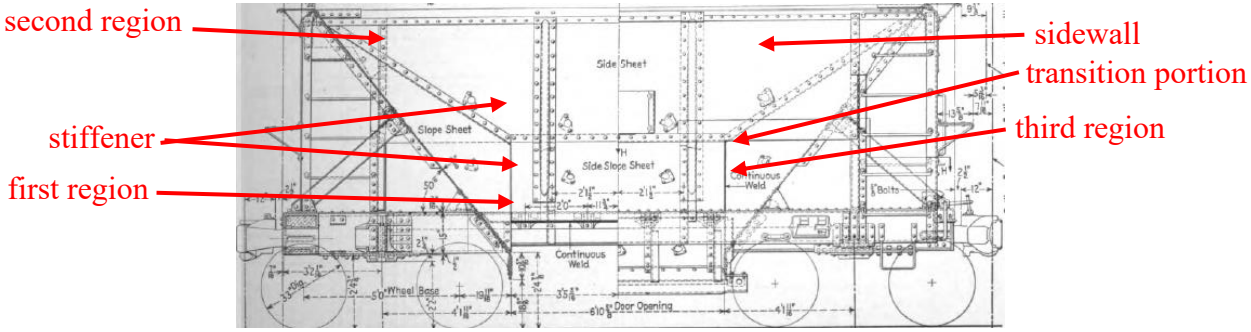
		The Pressed Steel DM&IR Ore Car and the Enterprise 75-Ton Ore Car disclose this limitation at least on pages 290 and 292 of the 1946 Cyclopedia. Pressed Steel DM&IR Ore Car 

Enterprise 75-Ton Ore Car

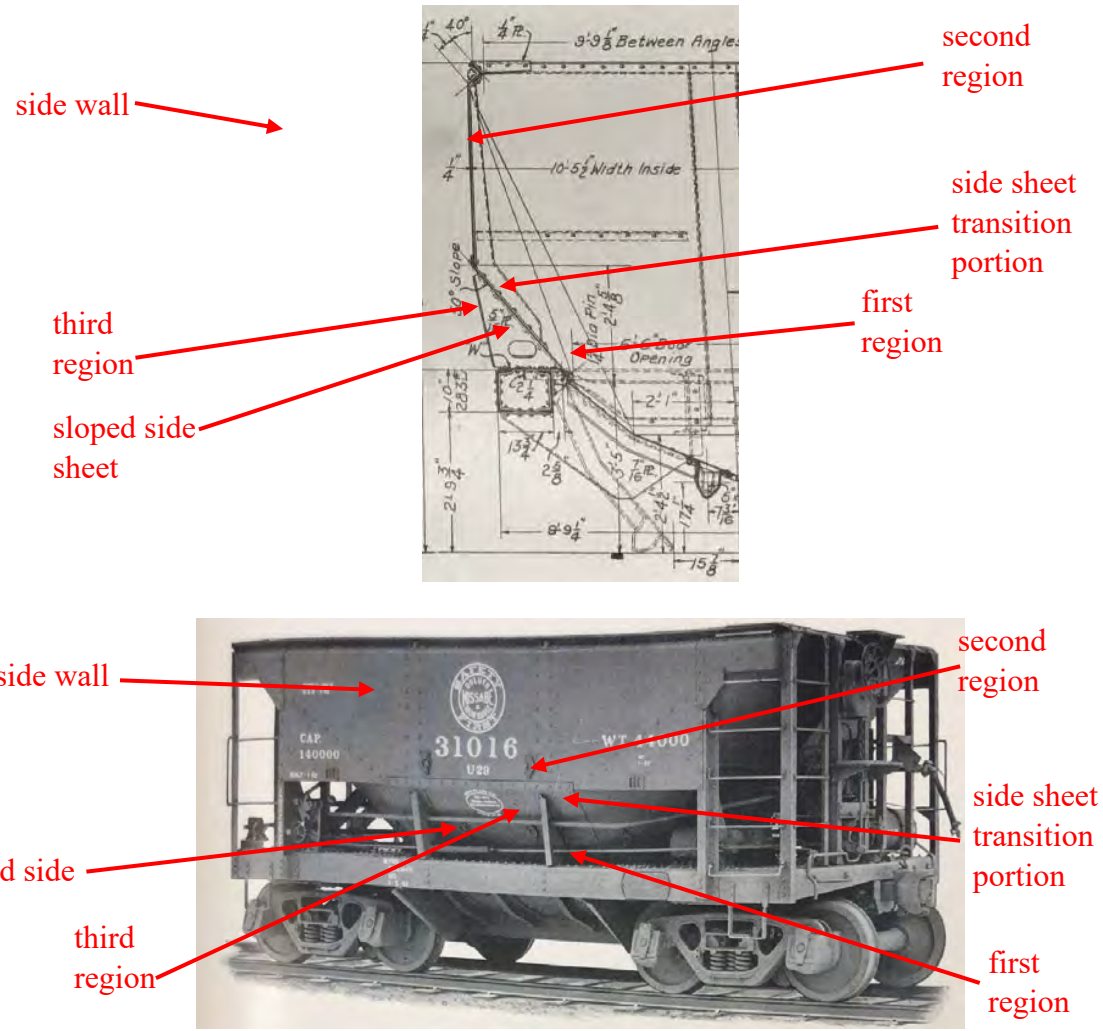


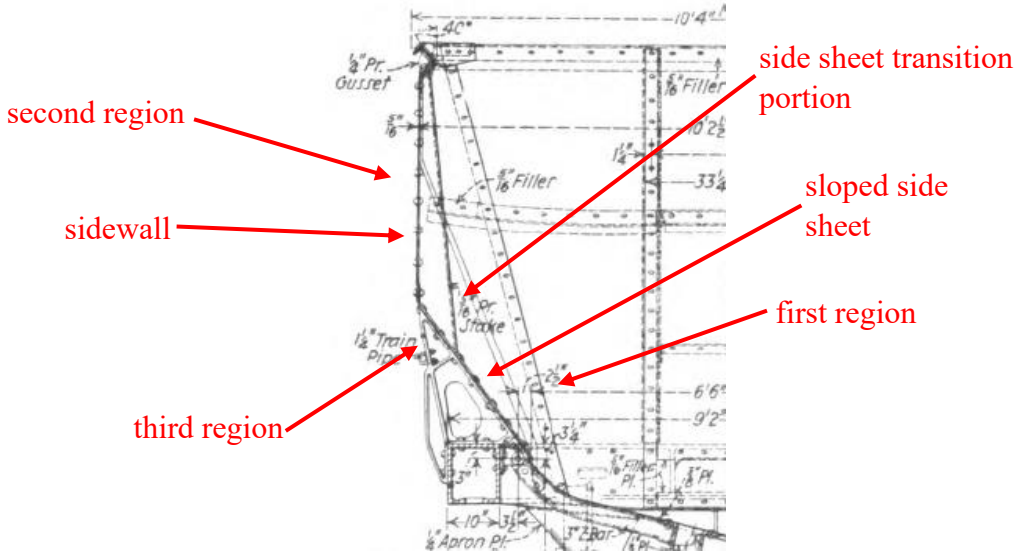
The NSC 50-Ton Ore Car discloses this limitation at least on page 294 of the 1946 Cyclopedia.



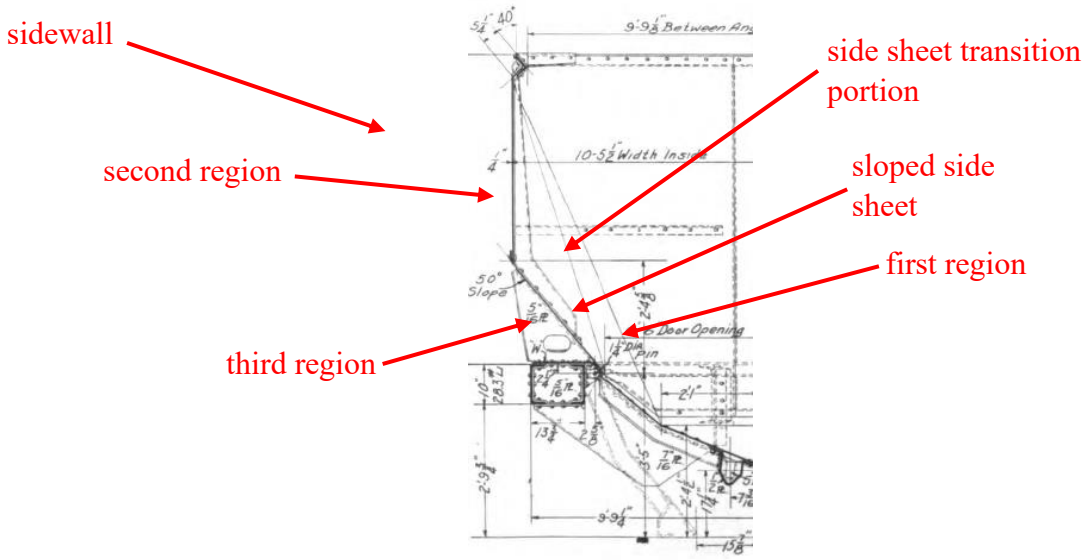


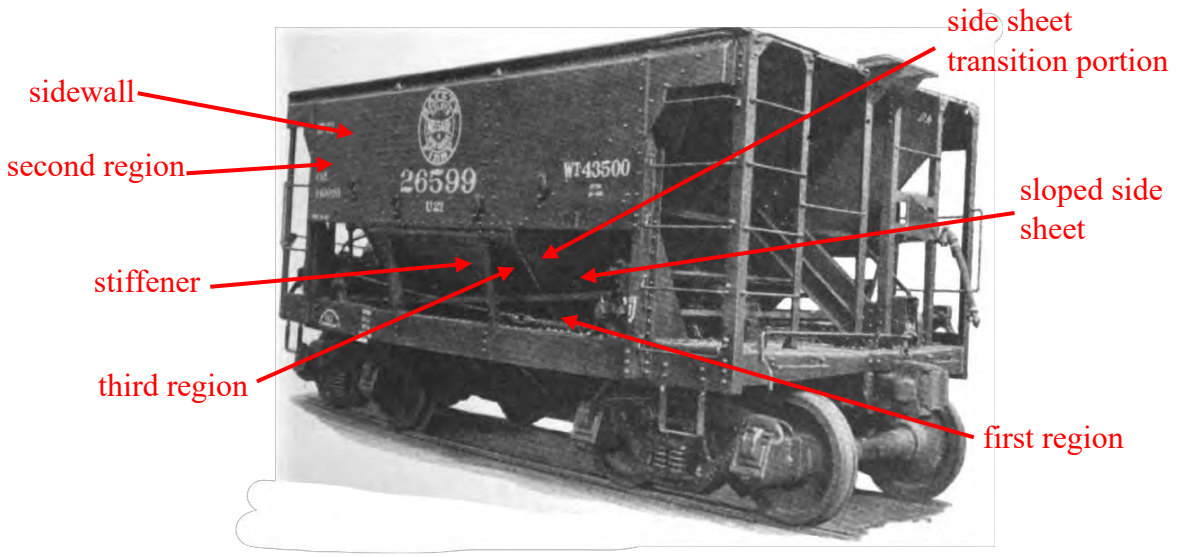
		The Bethlehem Steel L.S.&I. Ore Car, modified to use the stiffeners in any of the ore cars discussed above (*see* limitation 40h), would disclose the limitation of Claim 42.

43	The railroad hopper car of claim 40 wherein: said first side wall has a third region intermediate said first and second regions, said third region including a side sheet transition portion passing across said side wall stiffener from an inboard margin thereof to an outboard margin thereof; said hopper includes first and second sloped side sheets; and said first sloped side sheet meets said first side wall at said transition portion.	The Enterprise 75-Ton Ore Car discloses this limitation at least on pages 238 and 239 of the 1953 Cyclopedia. 

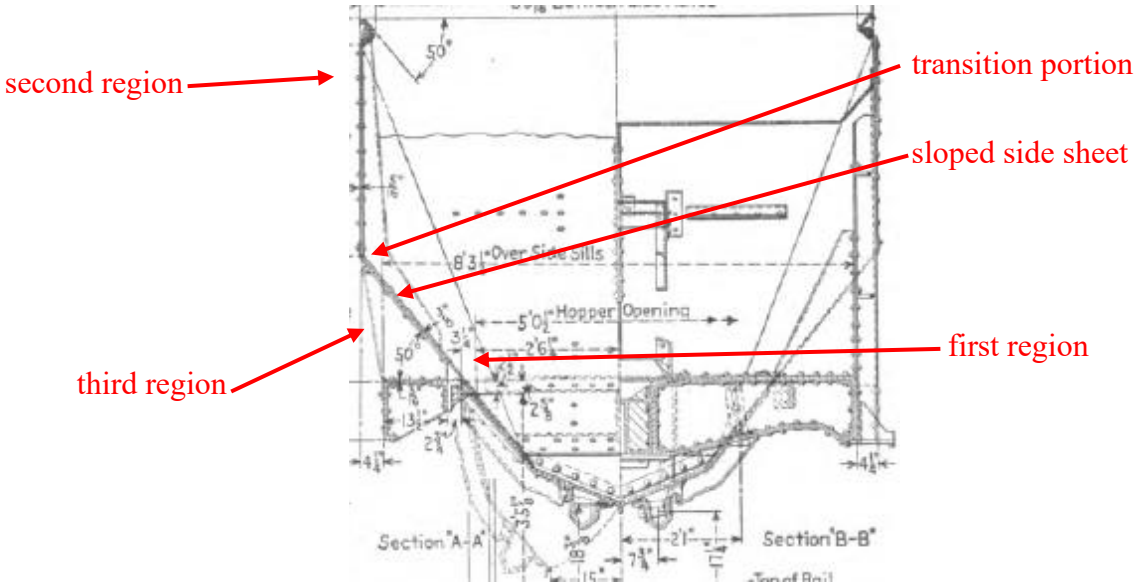
		The Pressed Steel DM&IR Ore Car and the Enterprise 75-Ton Ore Car disclose this limitation at least on pages 290, 292, and 299 of the 1946 Cyclopedia. Pressed Steel DM&IR Ore Car 

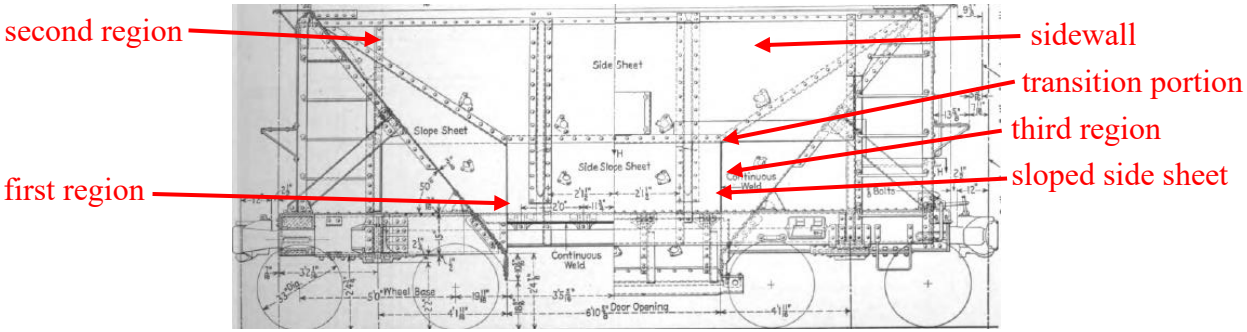
Enterprise 75-Ton Ore Car

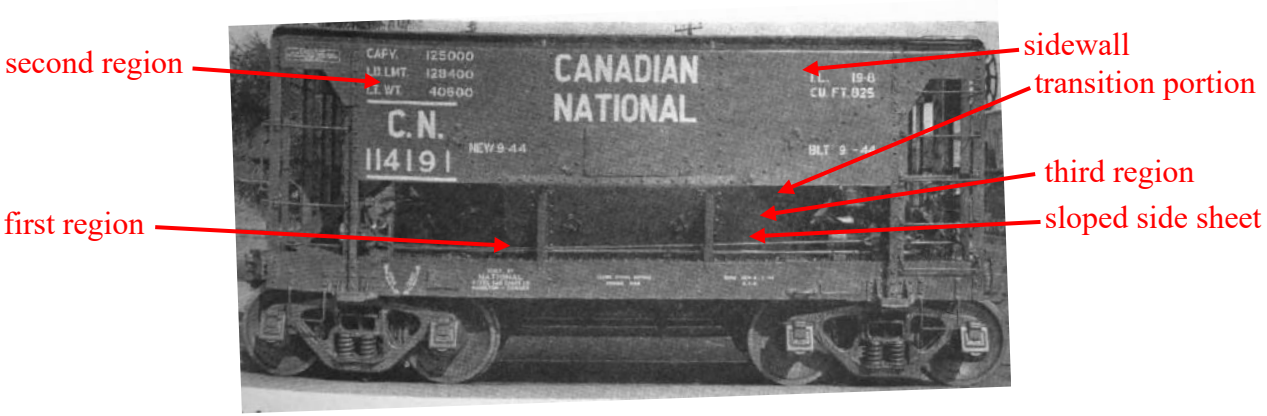



side sheet transition portion
sidewall
second region
sloped side sheet
stiffener
third region
first region
26599
WT43500

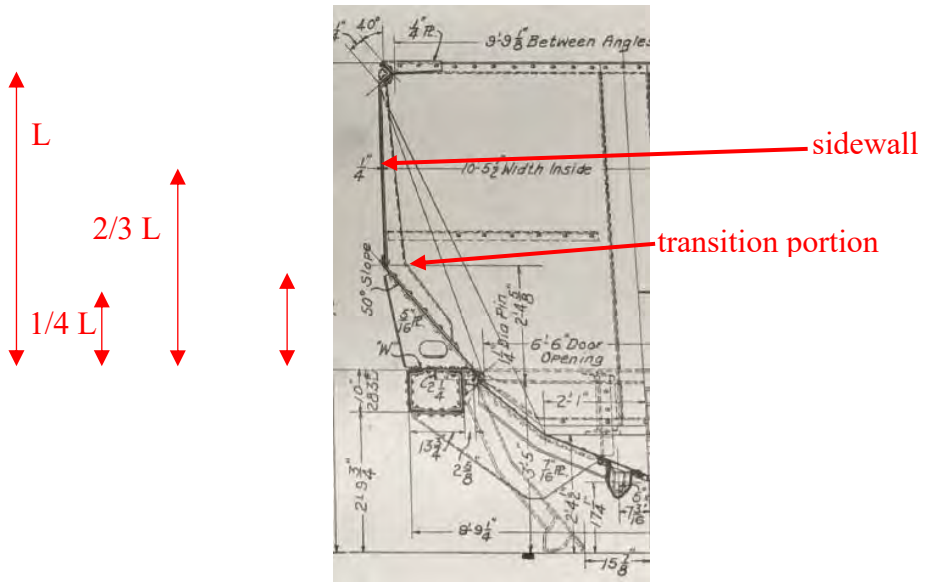
The NSC 50-Ton Ore Car discloses this limitation at least on pages 294 and 295 of the 1946 Cyclopedia.





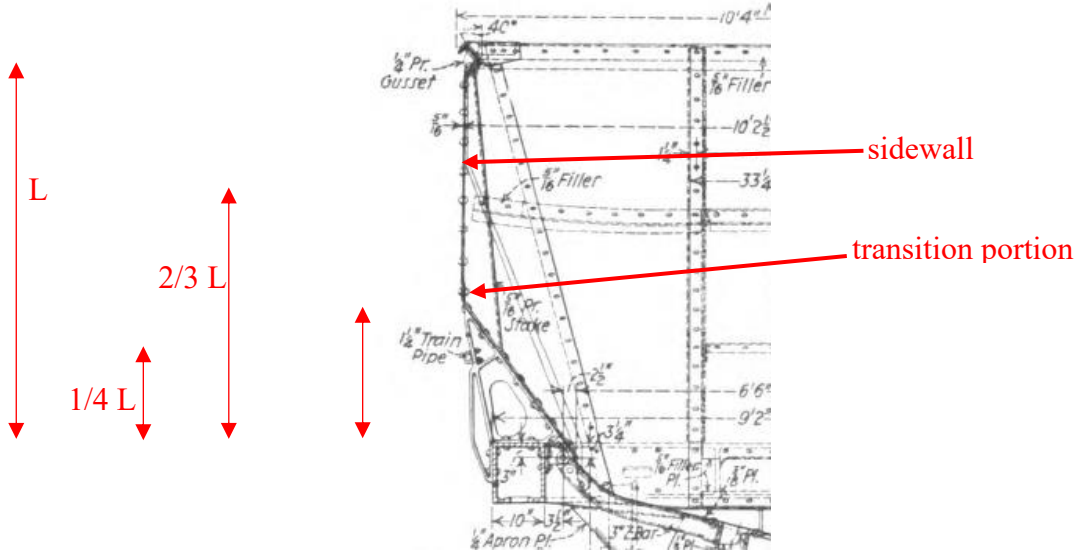


The Bethlehem Steel L.S.&I. Ore Car, modified to use the stiffeners in any of the ore cars discussed above (*see* limitation 40h), would disclose the limitation of Claim 43.

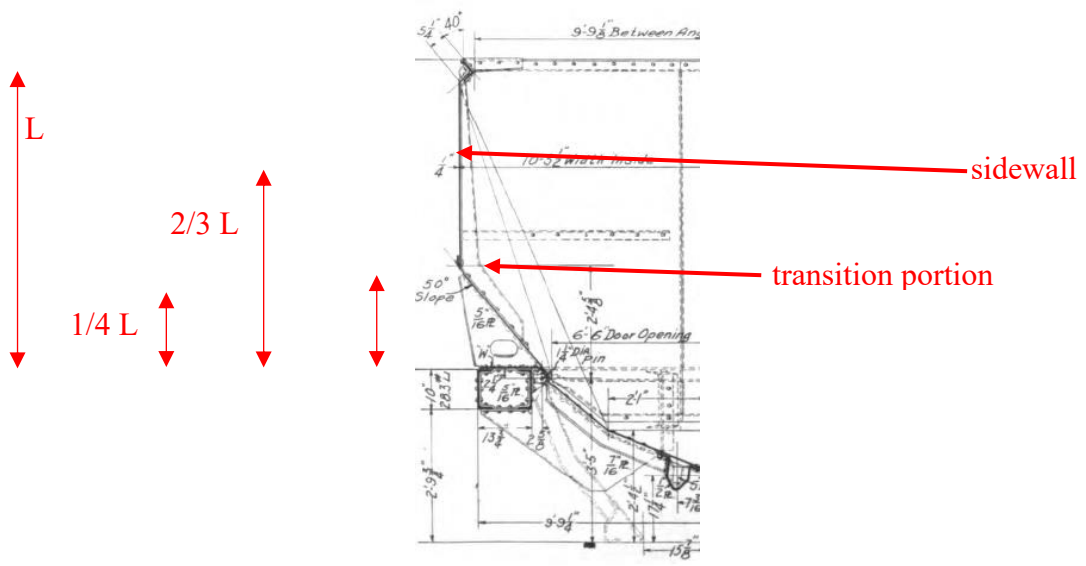
44	The railroad hopper car of claim 43 wherein said first side wall has an overall height from said side sill to said top chord, L, and said transition portion is located a distance above said side sill that is in the range of ¼ to ⅔ L.	The Enterprise 75-Ton Ore Car discloses this limitation at least on page 238 of the 1953 Cyclopedia. 

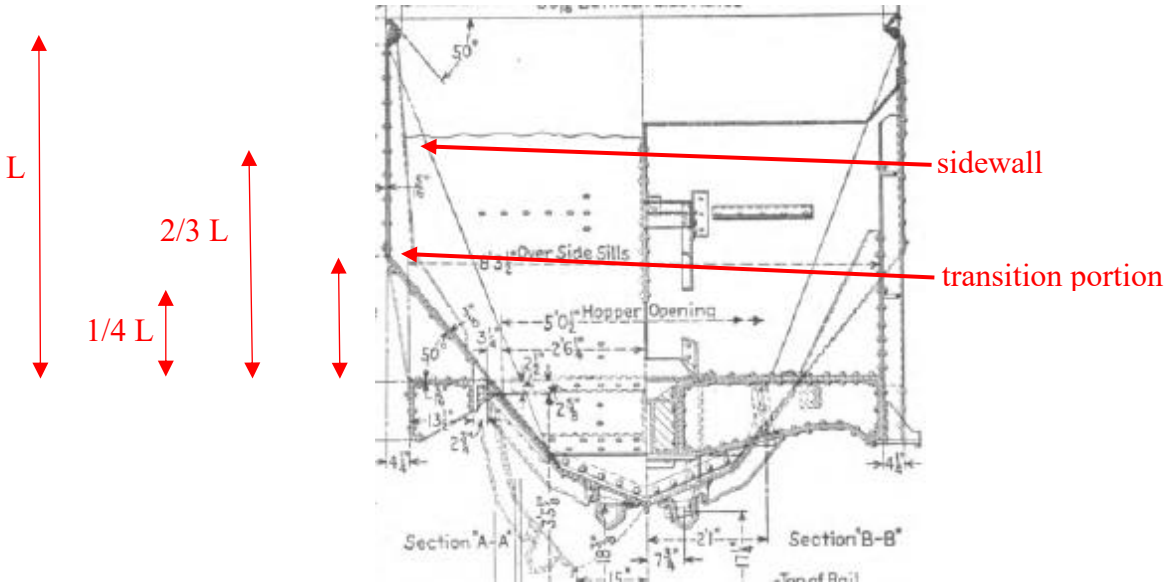
The Pressed Steel DM&IR Ore Car and the Enterprise 75-Ton Ore Car disclose this limitation at least on pages 290 and 292 of the 1946 Cyclopedia.

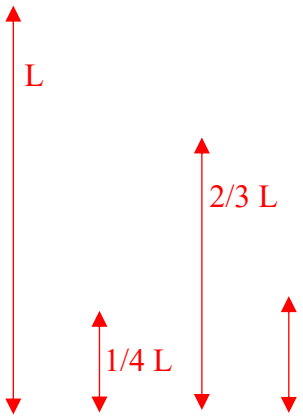
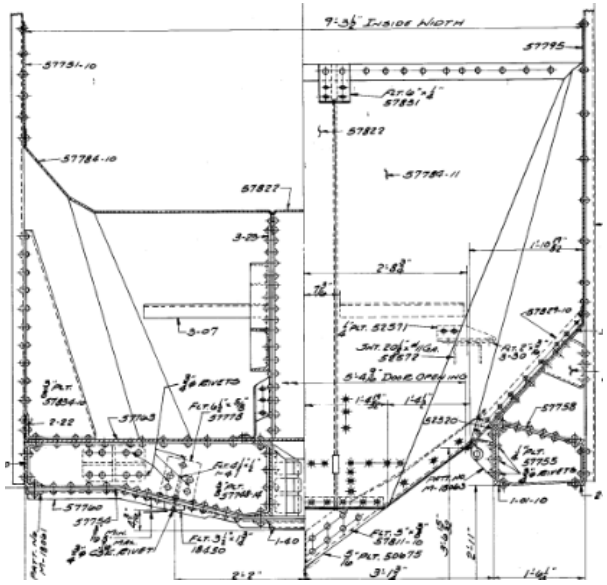
Pressed Steel DM&IR Ore Car



Enterprise 75-Ton Ore Car



		The NSC 50-Ton Ore Car discloses this limitation at least on pages 294 and 295 of the 1946 Cyclopedia. 

		The Bethlehem Steel L.S.&I. Ore Car, modified to use the stiffeners in any of the ore cars discussed above (*see* limitation 40h), would disclose the limitation of Claim 43.  

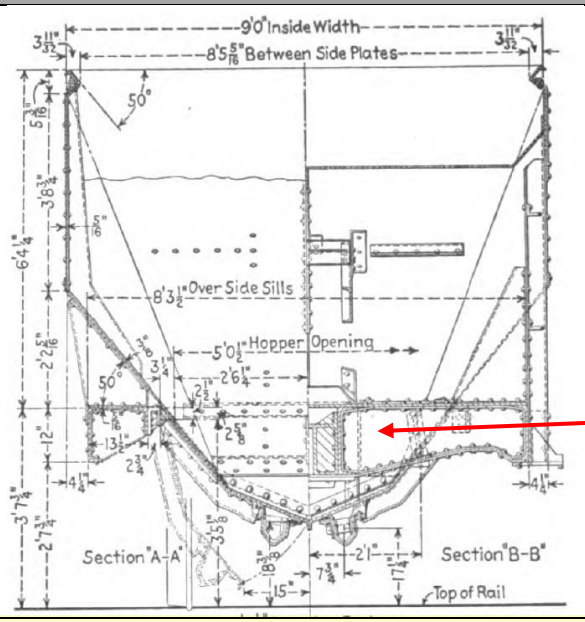
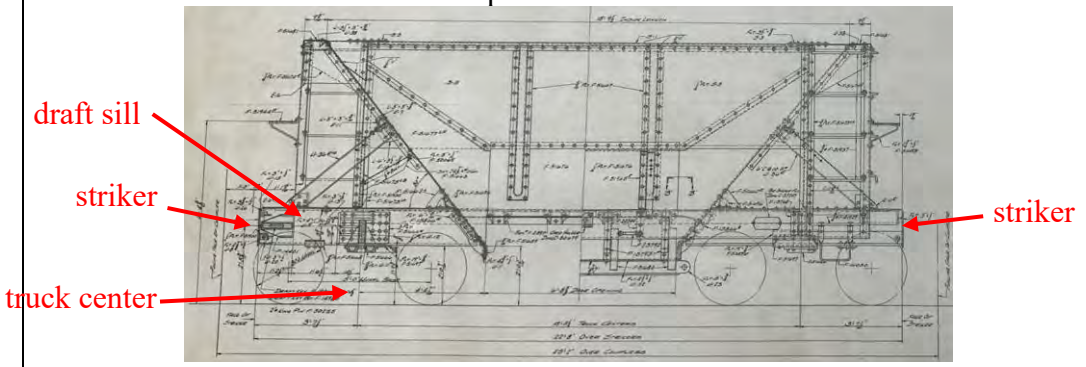
Lim.	Claim Language	Prior Art
		
2g	said draft sill having a striker longitudinally outboard of said first truck center;	As shown in the 1946 Cyclopedia (pp. 62, 254, 262-63, 276-77, 280-81, 972-74, 979, 1136) and Linstrom Patent II, it would have been obvious to add a striker, a standard component on rail cars, to any of the references herein even if the reference had not expressly practiced or disclosed it. Bethlehem Steel B.C.I.M. Ore Car practiced this limitation. 

EXHIBIT B

EXHIBIT C

EXHIBIT D

From: Adams, Kevin
Sent: Wednesday, February 26, 2025 10:08 PM
To: Justin Gillett; Brian Horne; Sean Murray
Cc: Lit FCAL.001L; JCP@PMHDELaw.com; Andrew Russell; John Shaw; IM-NSClit; Metjahic, Safet; Sheehan, Kenneth; Keeler, Robert; SKNationalSteelCar; dab@pmhdelaw.com
Subject: National Steel Car v. FreightCar America Inc. - Document Production

Counsel,

Production volume NSC_003 has been uploaded to the Ice Miller ShareFile site (icemiller.sharefile.com). A password for the zip file will follow in a separate email.

Regards,
Kevin

Kevin Adams | Associate
P 202-807-4021 **F** 202-824-8667
200 Massachusetts Ave NW Suite 400 Washington, DC 20001
Kevin.Adams@icemiller.com | **icemiller.com**

EXHIBIT E

From: Adams, Kevin
Sent: Friday, May 2, 2025 8:52 PM
To: Justin Gillett; Sean Murray; Brian Horne
Cc: Lit FCAL.001L; JCP@PMHDELaw.com; Andrew Russell; John Shaw; IM-NSClit; Metjahic, Safet; Sheehan, Kenneth; Keeler, Robert; SKNationalSteelCar; dab@pmhdelaw.com
Subject: National Steel Car v. FreightCar America Inc. - Interrogatory Responses & Document Production
Attachments: 2025.05.02 NSC's First Supplemental Objections and Responses to FCA's First Set of Interrogatories (Nos. 3-6, 8-12).pdf

Counsel,

Enclosed please find service of NSC's First Supplemental Objections and Responses to Defendant's First Sets of Requests for Production and Interrogatories.

Also, Production volume NSC_006 has been uploaded to the Ice Miller ShareFile site (icemiller.sharefile.com). A password for the zip file will follow in a separate email.

Regards,
Kevin

Kevin Adams | Associate
P 202-807-4021 **F** 202-824-8667
200 Massachusetts Ave NW Suite 400 Washington, DC 20001
Kevin.Adams@icemiller.com | **icemiller.com**

EXHIBIT F

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

NATIONAL STEEL CAR LIMITED, Plaintiff, v. FREIGHTCAR AMERICA, INC., FREIGHTCAR NORTH AMERICA, LLC, JAC OPERATIONS, INC., AND FCA-FASEMEX LLC Defendants.	)	C.A. No. 24-594-JLH-CJB

DECLARATION OF KEVIN ADAMS IN SUPPORT OF
NSC'S OPPOSOSITION TO FREIGHTCAR'S MOTION FOR LEAVE TO AMEND

I, Kevin Adams, declare as follows:

1. I am an attorney with the law firm Ice Miller LLP and counsel of record for Plaintiff National Steel Car ("NSC") in the above-captioned matter. I have personal knowledge of the matters set forth herein and if I am called upon to testify, I could and would testify competently thereto.

2. NSC's production volume NSC_003 contains documents bearing Bates numbers NSC003580-011421. The document bearing Bates number NSC009375 was included in NSC's production volume NSC_003 and was produced on February 26, 2025.

3. NSC's production volume NSC_006 contains documents bearing Bates numbers NSC017102-017158. The document bearing Bates numbers NSC017104-017105 was included in NSC's production volume NSC_006 and was produced on May 2, 2025.

Date: September 26, 2025

/s/ Kevin Adams
Kevin Adams

EXHIBIT G

Receipt date: 10/28/2011
Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed
12559065 - GAU: 3617
PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	12559065
Filing Date	2009-09-14
First Named Inventor	James W. FORBES
Art Unit	3617
Examiner Name	Jason C. Smith
Attorney Docket Number	200405.00128

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	0763186		1904-06-21	Johnson, S. J.	
	2	1421439		1922-07-04	Finckh, F.	
	3	3173381		1965-03-16	Charles, A. F., et al.	
	4	3187684		1965-06-08	Ortner, R. C.	
	5	3408956		1968-11-05	Rebenok, A. G., et al.	
	6	3483830		1969-12-16	McGrath, E.	
	7	3577932		1971-05-11	Pulcrano, Frank C., et al.	
	8	3596609		1971-08-03	Ortner, Robert C.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.C.S.

Receipt date: 10/28/2011

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	12559065
Filing Date	2009-09-14
First Named Inventor	James W. FORBES
Art Unit	3617
Examiner Name	Jason C. Smith
Attorney Docket Number	200405.00128

	9	3611947		1971-10-12	Nagy, Ernest J.	
	10	3654873		1972-04-11	Floehr, Walter, L.	
	11	3710730		1973-01-16	Austgen, Kenneth J., et al.	
	12	3717109		1973-02-20	Miller, R. W.	
	13	3717110		1973-02-20	Miller, R. W.	
	14	3800711		1974-04-02	Tuttle, J. H.	
	15	3807316		1974-04-30	Miller, R. W.	
	16	3815514		1974-06-11	Heap, James C.	
	17	3818842		1974-06-25	Heap, James C.	
	18	3863986		1975-02-04	Mentessi	
	19	3872796		1975-03-25	Adler, Franklin P., et al.	

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Receipt date: 10/28/2011

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Art Unit	3617
Examiner Name	Jason C. Smith
Attorney Docket Number	200405.00128

12559065 - GAU: 3617

	20	3878794		1975-04-22	Adler, F. P.	
	21	3931768		1976-01-13	Price, et al.	
	22	3949681		1976-04-13	Miller, R. W.	
	23	3994238		1976-11-30	Adler, F. P.	
	24	4106813		1978-08-15	Goodbary, E. R.	
	25	4120409		1978-10-17	vander Werff, B.	
	26	4194450		1980-03-25	Miller, R. W.	
	27	4222334		1980-09-16	Peterson, William H.	
	28	4224877		1980-09-30	Stark, Marvin, et al.	
	29	4232989		1980-11-11	Miller, R. W.	
	30	4246849		1981-01-27	Gramse, Harold E.	

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Receipt date: 10/28/2011

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Filing Date	2009-09-14
First Named Inventor	James W. FORBES
Art Unit	3617
Examiner Name	Jason C. Smith
Attorney Docket Number	200405.00128

	31	4252068		1981-02-24	Nolan, Harry E.	
	32	4250814		1981-02-17	Stark, M. et al.	
	33	4348962		1982-09-14	Smith, Stephen W.	
	34	4542701		1985-09-24	Fischer, Robert T., et al.	
	35	4555033		1985-11-26	Miller, R. W.	
	36	4601244		1986-07-22	Fischer, Robert T.	
	37	4740130		1988-04-26	Prins, P. D.	
	38	4800820		1989-01-31	Tomaka, Jan Z.	
	39	4843974		1989-07-04	Ritter John A., et al.	
	40	4884511		1989-12-05	Hallam, Keith J., et al.	
	41	5063858		1991-11-12	Dugge, Richard H.	

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Receipt date: 10/28/2011

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Filing Date	2009-09-14
First Named Inventor	James W. FORBES
Art Unit	3617
Examiner Name	Jason C. Smith
Attorney Docket Number	200405.00128

	42	5086709		1992-02-11	Fischer Robert T., et al.	
	43	5144895		1992-09-08	Murray, J. R.	
	44	5163372		1992-11-17	Galvan, G. L., et al.	
	45	5249531		1993-10-05	Taylor, Fred J.	
	46	5261333		1993-11-16	Miller, D. L.	
	47	5823118		1998-10-20	Manstrom	
	48	6604469	B1	2003-08-12	Galvan, Guadalupe L., et al.	
	49	6745701	B2	2004-06-08	Elder, John B.	
	50	7367272	B2	2008-05-06	Taylor, Fred J.	
	51	7780021	B2	2010-08-24	Forbes, James W.	

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Application Number	12559065
Filing Date	2009-09-14
First Named Inventor	James W. FORBES
Art Unit	3617
Examiner Name	Jason C. Smith
Attorney Docket Number	200405.00128

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

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Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	1082524	CA	A1	2009-07-22			☐
	2	101486347	CN		2009-07-22			☐
	3	0543279	EP	B1	1995-05-17	ABB HENSCHEL WAGGON UNI-ON		☐
	4	1798103	EP	A1	2007-06-20	Wagony Swidnica SA		☐
	5	1790547	EP	A1	2007-05-30			☐
	6	1318571	GB		1973-05-31			☐
	7	2013598	GB		1979-08-15	Luossavaara-Kiirunavaara Aktiebolag		☐

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Receipt date: 10/28/2011

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(**Not for submission under 37 CFR 1.99)**

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Filing Date	2009-09-14
First Named Inventor	James W. FORBES
Art Unit	3617
Examiner Name	Jason C. Smith
Attorney Docket Number	200405.00128

12559065 - GAU: 3617

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	FREIGHT CARS: Hopper, Ore; Car Builders' Cyclopedia, 1937, pp. 313-320, 14th ed., Simmons-Boardman Publishing Corporation, New York, NY.	☐
	2	A.C.F. Covered and Open Top Hopper Cars; Car Builders' Cyclopedia, 1943, pp. 281-289, 16th ed., Simmons-Boardman Publishing Corporation, New York, NY.	☐
	3	FREIGHT CARS: Hopper, Ore, Class HMA; Car Builders' Cyclopedia, 1957, pp. 265-272, 20th ed., Simmons-Boardman Publishing Corporation, New York, NY.	☐
	4	FREIGHT CARS: Hopper, Ore, Class HMA; Car Builders' Cyclopedia, 1961, pp. 246-258, 21st ed., Simmons-Boardman Publishing Corporation, New York, NY.	☐
	5	Car and Locomotive Cyclopedia, 1966, 10 pages, 1st ed., Simmons-Boardman Publishing Corporation, New York, NY.	☐
	6	5 Photographs of Quebec Iron and Titanium (QIT) ore hopper car No. 556, dated August 15, 2007.	☐
	7	Drawing of QIT car dated August 27, 2007.	☐
	8	2 Sheets of Details of End Structure of an Admitted Prior Art Grain Car of National Steel Car showing End Post, Lateral Intermediate Stub Wall, Elephant Ears Arrangement and End Slope Sheet to Shear Plate Connection at least as early as January 1, 2001.	☐
	9	Reproduction of Design Drawing of Dulth, Missabi & Iron Range (DM&IR) Open Topped Ore Hopper Car General Arrangement Drawing 8760 Drawn April 8, 1950, (Quality Poor in Original), Showing Rear Draft Stops Extending Inboard of Truck Center.	☐

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Receipt date: 10/28/2011

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	12559065
Filing Date	2009-09-14
First Named Inventor	James W. FORBES
Art Unit	3617
Examiner Name	Jason C. Smith
Attorney Docket Number	200405.00128

12559065 - GAU: 3617

EXAMINER SIGNATURE			
Examiner Signature	/Jason Smith/	Date Considered	12/15/2011

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

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Receipt date: 10/28/2011

12559065 - GAU: 3617

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	12559065
Filing Date	2009-09-14
First Named Inventor	James W. FORBES
Art Unit	3617
Examiner Name	Jason C. Smith
Attorney Docket Number	200405.00128

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Michael H. Minns/	Date (YYYY-MM-DD)	2011-10-27
Name/Print	Michael H. Minns	Registration Number	31985

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.C.S.

EXHIBIT H

Receipt date: 10/13/2011 12816660 - GAU: 3617
Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed
PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	12816660
Filing Date	2010-06-16
First Named Inventor	James W. Forbes
Art Unit	3617
Examiner Name	Jason C. Smith
Attorney Docket Number	200405.00139

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	4250814		1981-02-17	Stark et al.	
	2	3931768		1976-01-13	Price et al.	
	3	5823118		1998-10-20	Manstrom	
	4	4232989		1980-11-11	Miller	
	5	3800711		1974-04-02	Tuttle	
	6	5261333		1993-11-16	Miller	
	7	3717109		1973-02-20	Miller	
	8	1421439		1922-07-04	Finckh	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.C.S.

Receipt date: 10/13/2011

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	12816660
Filing Date	2010-06-16
First Named Inventor	James W. Forbes
Art Unit	3617
Examiner Name	Jason C. Smith
Attorney Docket Number	200405.00139

	9	3863986		1975-02-04	Mentessi	
	10	3878794		1975-04-22	Adler	
	11	3994238		1976-11-30	Adler	
	12	4106813		1978-08-15	Goodbary	
	13	4120409		1978-10-17	vander Werff	
	14	4740130		1988-04-26	Prins	
	15	5144895		1992-09-08	Murray	
	16	5163372		1992-11-17	Galvan et al.	
	17	0763186		1904-06-21	Johnson	
	18	3173381		1965-03-16	Charles et al.	
	19	3187684		1965-06-08	Ortner	

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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.C.S.

Receipt date: 10/13/2011

12816660 - GAU: 3617

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	12816660
Filing Date	2010-06-16
First Named Inventor	James W. Forbes
Art Unit	3617
Examiner Name	Jason C. Smith
Attorney Docket Number	200405.00139

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Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
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	1	0543279	EP	B1	1995-05-17	ABB HENSCHEL WAGGON UNI-ON		☐
	2	1798103	EP	A1	2007-06-20	Wagony Swidnica SA		☐
	3	1318571	GB		1973-05-31			☐
	4	2013598	GB		1979-08-15	Luossavaara-Kiirunavaara Aktiebolag		☐
	5	1082524	CA	A1	2009-07-22			☐
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Receipt date: 10/13/2011

12816660 - GAU: 3617

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	12816660
Filing Date	2010-06-16
First Named Inventor	James W. Forbes
Art Unit	3617
Examiner Name	Jason C. Smith
Attorney Docket Number	200405.00139

	7	EP1790547A1	EP			2007-05-30		☐

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	1	5 Photographs of Quebec Iron and Titanium (QIT) ore hopper car No. 556, dated August 15, 2007	☐
	2	Drawing of QIT car dated August 27, 2007	☐
	3	2 Sheets of Details of End Structure of an Admitted Prior Art Grain Car of National Steel Car Showing End Post, Lateral Intermediate Stub Wall, Elephant Ears Arrangement and End Slope Sheet to Shear Plate Connection at least as early as January 1, 2001	☐
	4	Reproduction of Design Drawing of Dulth, Missabi & Iron Range (DM&IR) Open Topped Ore Hopper Car General Arrangement Drawing 8760 Drawn April 8, 1950, (Quality Poor in Original), Showing Rear Draft Stops Extending Inboard of Truck Center.	☐
	5	FREIGHT CARS: Hopper, Ore; Car Builders' Cyclopedia, 1937, pp. 313-320, 14th ed., Simmons-Boardman Publishing Corporation, New York, NY.	☐
	6	A.C.F. Covered and Open Top Hopper Cars; Car Builders' Cyclopedia, 1943, pp. 281-289, 16th ed., Simmons-Boardman Publishing Corporation, New York, NY.	☐
	7	FREIGHT CARS: Hopper, Ore, Class HMA; Car Builders' Cyclopedia, 1957, pp. 265-272, 20th ed., Simmons-Boardman Publishing Corporation, New York, NY.	☐
	8	FREIGHT CARS: Hopper, Ore, Class HMA; Car Builders' Cyclopedia, 1961, pp. 246-258, 21st ed., Simmons-Boardman Publishing Corporation, New York, NY.	☐

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Art Unit	3617
Examiner Name	Jason C. Smith
Attorney Docket Number	200405.00139

	9	Car and Locomotive Cyclopedia, 1966, 10 pages, 1st ed., Simmons-Boardman Publishing Corporation, New York, NY.	☐

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EXAMINER SIGNATURE

Examiner Signature	/Jason C. Smith/	Date Considered	10/20/2011

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[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

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First Named Inventor	James W. Forbes
Art Unit	3617
Examiner Name	Jason C. Smith
Attorney Docket Number	200405.00139

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Michael H Minns/	Date (YYYY-MM-DD)	2011-10-13
Name/Print	Michael H Minns	Registration Number	31985

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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EXHIBIT I

1943
Car Builders' Cyclopedia
Of American Practice

Definitions and Typical Illustrations of Railroad and Industrial Cars, Their Parts and Equipment; Cars Built in America for Export to Foreign Countries; Descriptions and Illustrations of Shops and Equipment Employed in Car Construction and Repair

Sixteenth Edition—1943

First Edition—"Car Builders' Dictionary"—1879

Compiled and Edited
for the
Association of American Railroads—Mechanical Division
(Formerly Master Car Builders' Association)

EDITOR
ROY V. WRIGHT
Managing Editor *Railway Age* and
Editor *Railway Mechanical Engineer*

MANAGING EDITOR
ROBERT C. AUGUR
Managing Editor *Locomotive Cyclopedia* and
Associate Editor *Railway Mechanical Engineer*

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Seattle 1, Wash. 1038 Henry Bldg.
San Francisco 4, Calif. 300 Montgomery St.
Los Angeles 14, Calif. 560 West 6th St.

A.C.F. Covered and Open Top Hopper Cars

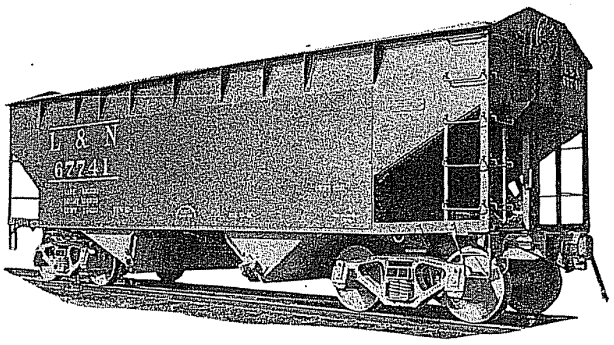
Covered types designed especially for bulk shipment of granular lading
Rugged, dependable open top equipment for economy in general service

A.C.F. has developed during recent years, many new and interesting hopper cars expressly created for the better, safer, more economical handling of specific ladings.

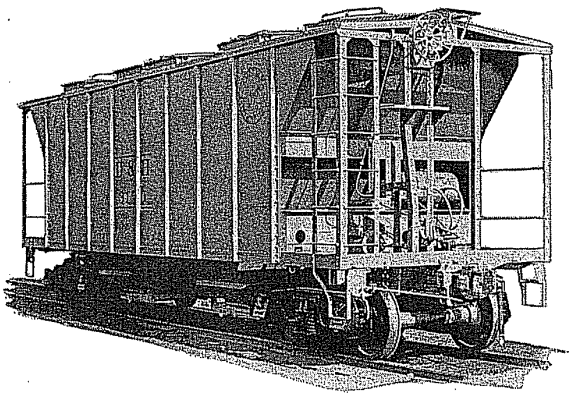
Covered Hopper Cars for Pulverized and Granular Substances

Improved and highly refined designs of covered hopper cars, originated and built by A.C.F. have been furnished to many railroads for the carriage of cement and other granular commodities. Dusttight and watertight construction affords perfect protection for the lading, the cost of bags and bagging is saved, and loading and unloading are quick and economical.

Commodities other than cement are also being handled in bulk shipments in cars built by A.C.F. These include carbon black, edible grains, wood flour, fullers' earth, soda ash, and similar finely divided or granular substances.



Above:—Louisville & Nashville, 50-ton twin hopper car. Inside length, 33 ft. 0 in.; width, 10 ft. 4 in.; height of sides, 10 ft. 8 in.; capacity, 2191 cu. ft.; weight, 39,300 lb.; load limit, 129,700 lb.

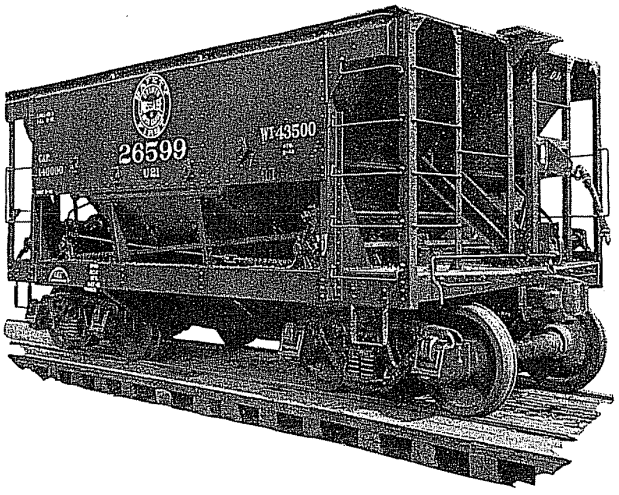


Late design of covered hopper car for bulk shipment of cement. Capacity, 140,000 lb.; load limit, 161,700 lb.; light weight, 48,300 lb.; cubic capacity, 2,040 cu. ft.

Open Top Cars for Ore and Coal

Numerous designs of open top hopper cars have also been developed, some with special provisions for improved handling of the wide variety of commodities shipped in this general type of freight car.

Some are fabricated from low-alloy steels to obtain light weight construction—others are built of copper-bearing steels to resist corrosion—and still others follow conventional lines employing ordinary carbon steels. The principal commodities which these cars are designed to handle include not only coal and ore, but also coke, limestone, gravel, trap rock, sand, and all materials of this character.



Below:—Duluth, Missabe & Iron Range, 75-ton hopper ore car. Length inside, 19 ft. 10⅞ in.; width, 10 ft. 5½ in.; height of sides, 10 ft. 2 in.; door opening, 2 ft. 7¾ in. wide by 6 ft. 10 in. long; weight, 43,500 lb.; load limit, 166,500 lb.

AMERICAN CAR AND FOUNDRY COMPANY, NEW YORK, N. Y.

Other Products and Branch Offices Are Listed in the Classified Indexes

Sec. 2—265

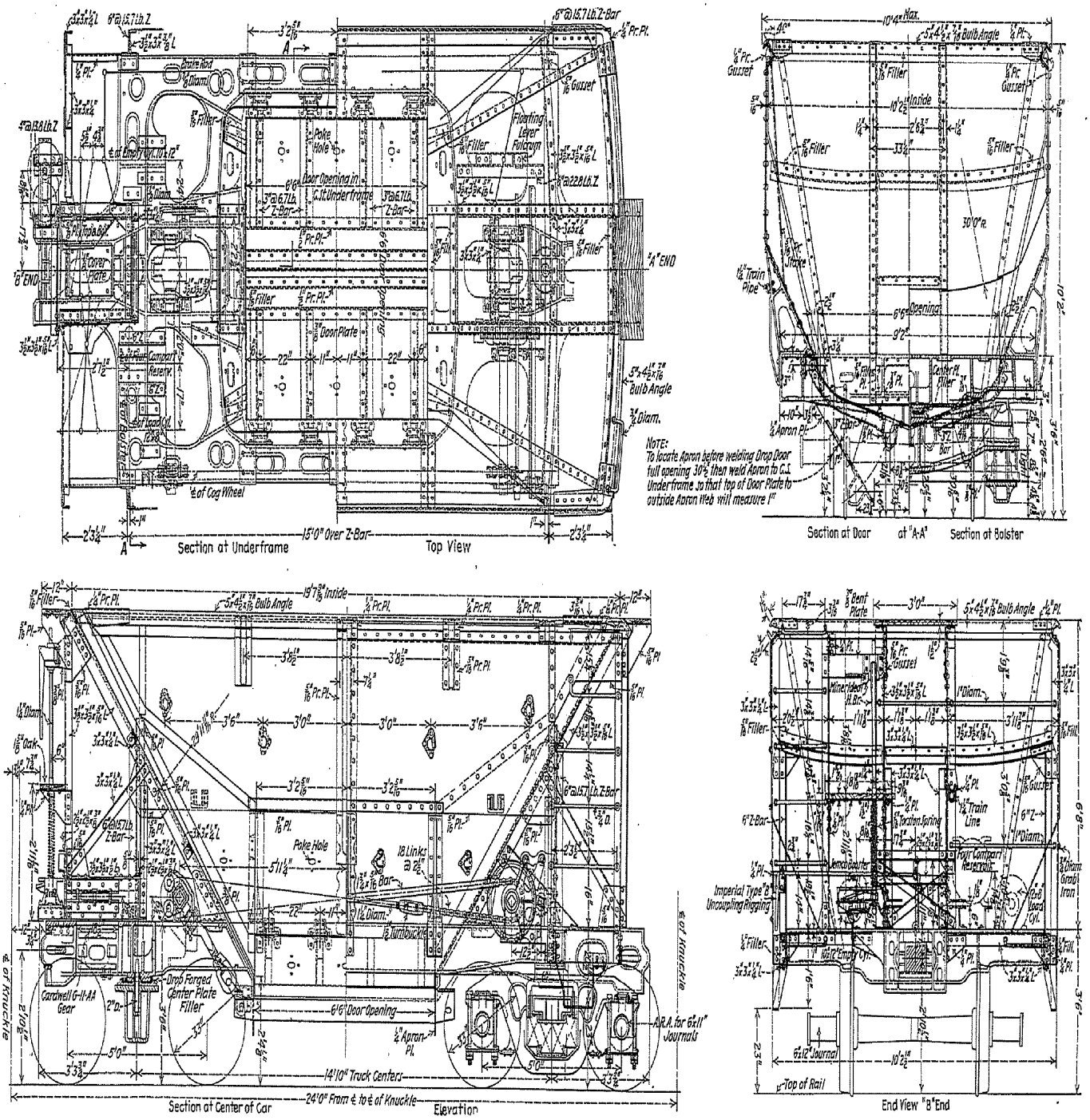


Fig. 2.666—Plan, elevation and sections of Duluth, Missabe & Iron Range 80-ton capacity hopper ore car with Commonwealth cast steel underframe. Road Class U-14.
Roads Nos. 22,001-22,125; capacity, 935 cu. ft.; light weight, 47,600 lb.; load limit, 162,400 lb.
Descriptions: *Railway Age*, Feb. 8, 1928. *Railway Mechanical Engineer*, May 1928
(Later cars have been of fabricated type. See Fig. 2.667)
(For ore car door operating mechanism see Sec. 3)

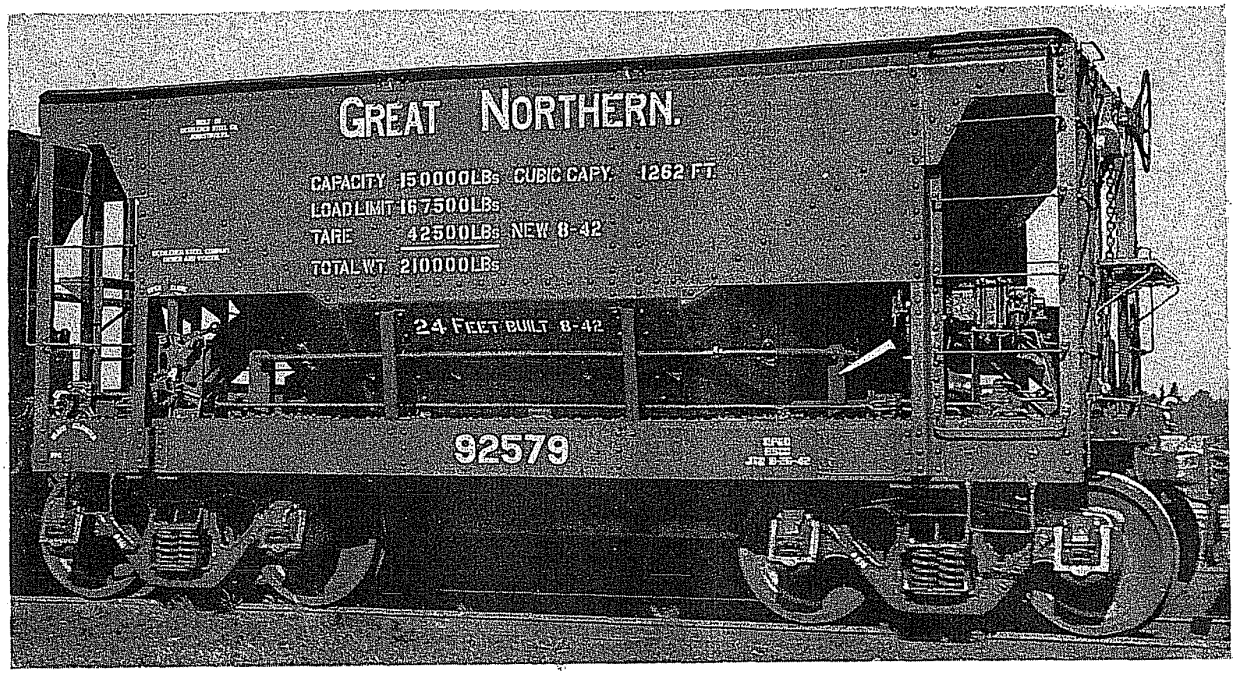


Fig. 2.667—Great Northern 75-ton capacity hopper iron ore car. Series 90,000-92,999. Builder, Bethlehem Steel Company.

A. A. R. Class	HMA	Length inside	19 ft. 10⅞ in.
Nominal capacity	150,000 lb.	Width inside	10 ft. 5½ in.
Load limit	167,500 lb.	Coupled length	24 ft. 0 in.
Cubic capacity, level	1,262 cu. ft.	Length over strikers	21 ft. 5¼ in.
Light weight	42,500 lb.	Width outside	10 ft. 6 in.
Axle journals	6 in. x 11 in.	Height of sides	10 ft. 2 in.

Fig. 2.668—Duluth, Missabe & Iron Range 70-ton capacity hopper iron ore car. Road Class U19. Builder, Pullman-Standard Car Manufacturing Co.

A. A. R. Class	HMA	Axle journals	6 in. x 11 in.
Nominal capacity	140,000 lb.	Length over strikers	21 ft. 6 in.
Load limit	166,400 lb.	Length inside	19 ft. 10 in.
Cubic capacity, level	1,000 cu. ft.	Width inside	10 ft. 5 in.
Light weight	43,600 lb.	Height of sides	10 ft. 2 in.

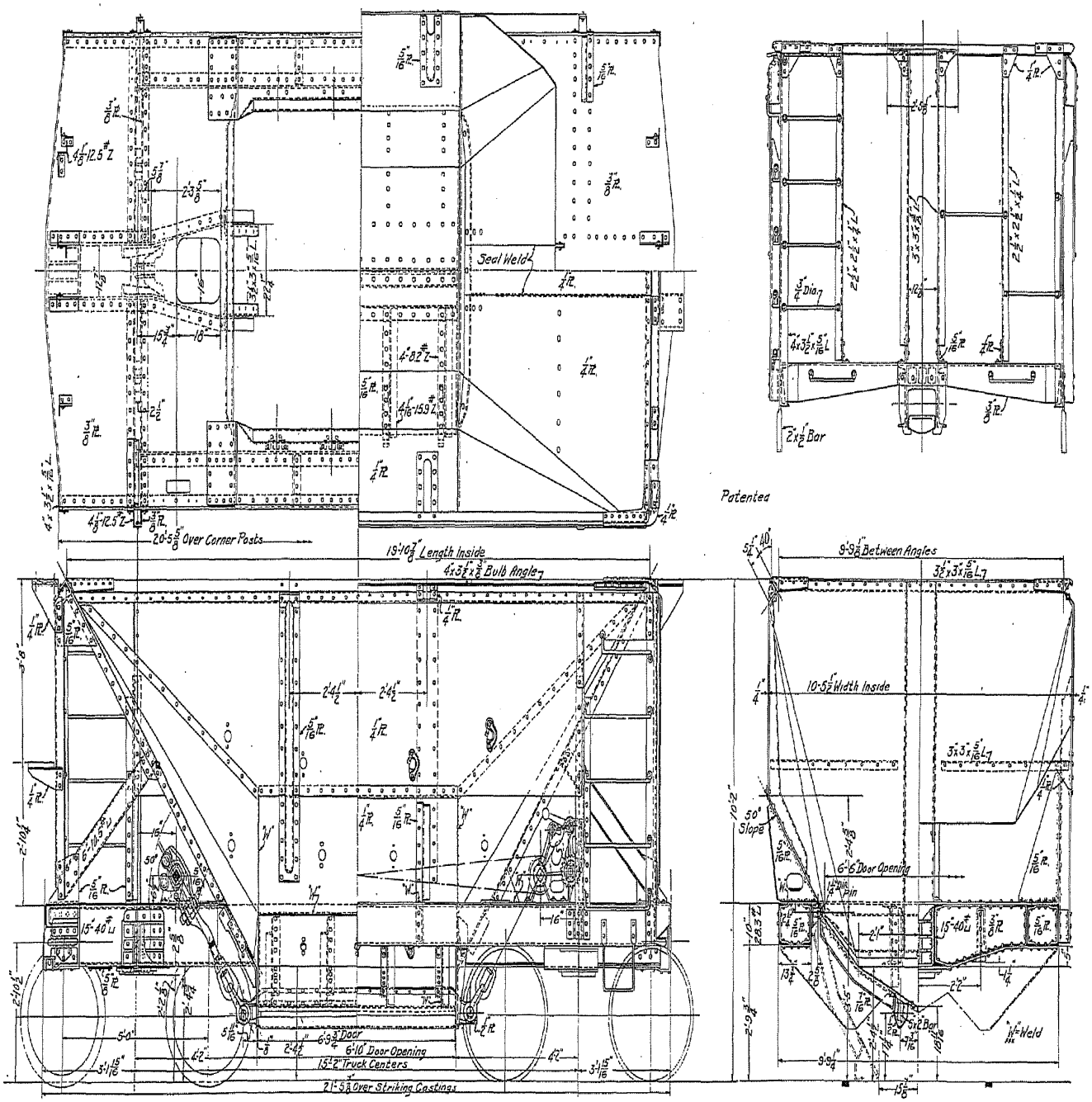


Fig. 2.669—75-Ton all-steel 6 in. by 11 in. axle load Enterprise hopper iron ore car, center discharge. Cubic capacity, 1,040 cu. ft. level or 1,244 cu. ft. with 12-in. average heap.

Enterprise Railway Equipment Company

(See also Page 289)

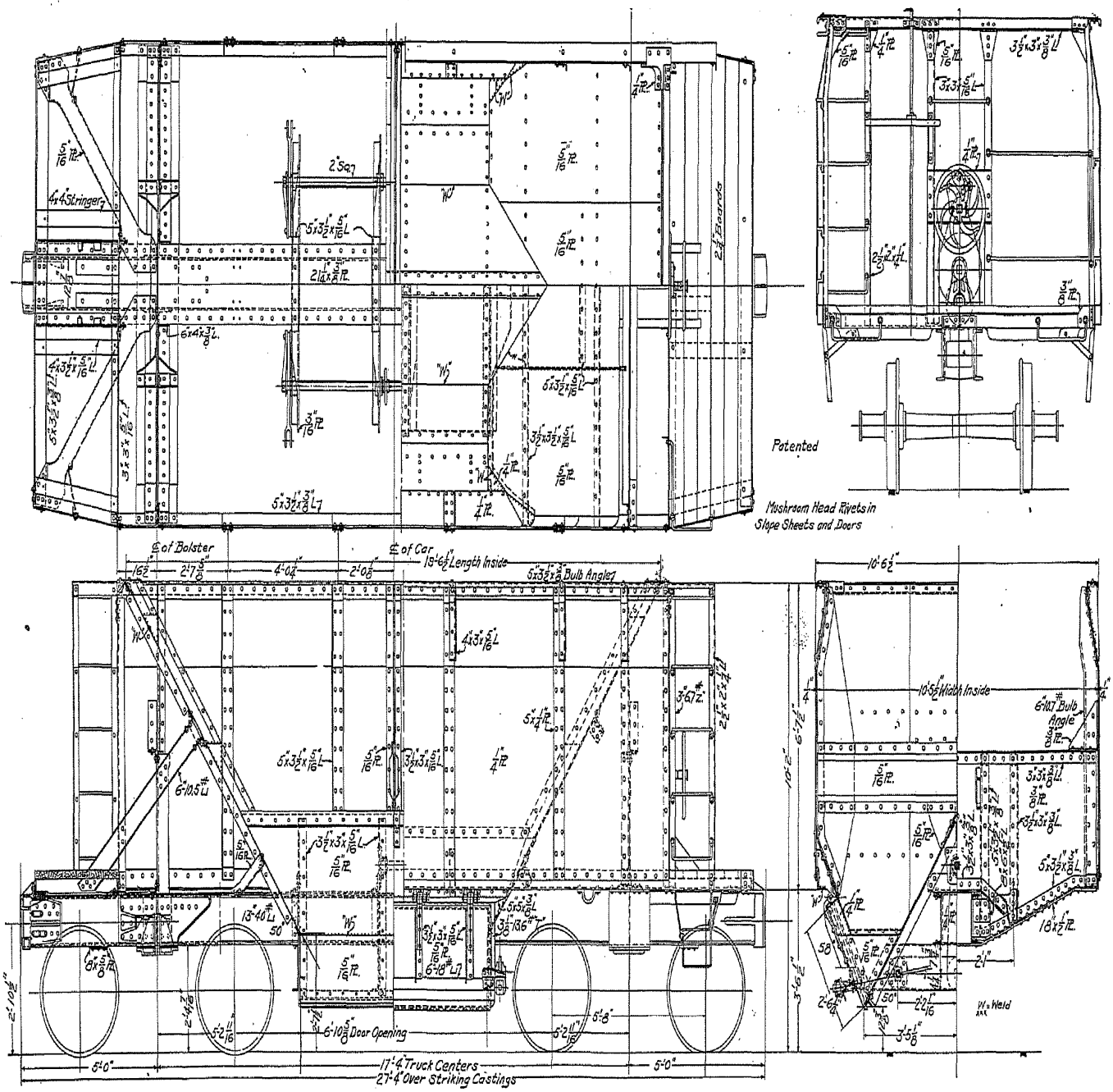


Fig. 2.670—70-Ton all-steel Enterprise hopper ore car, side discharge. Cubic capacity, 981 cu. ft. level or 1,170 cu. ft. with 12 in. average heap.

Enterprise Railway Equipment Company

(See also Page 289)

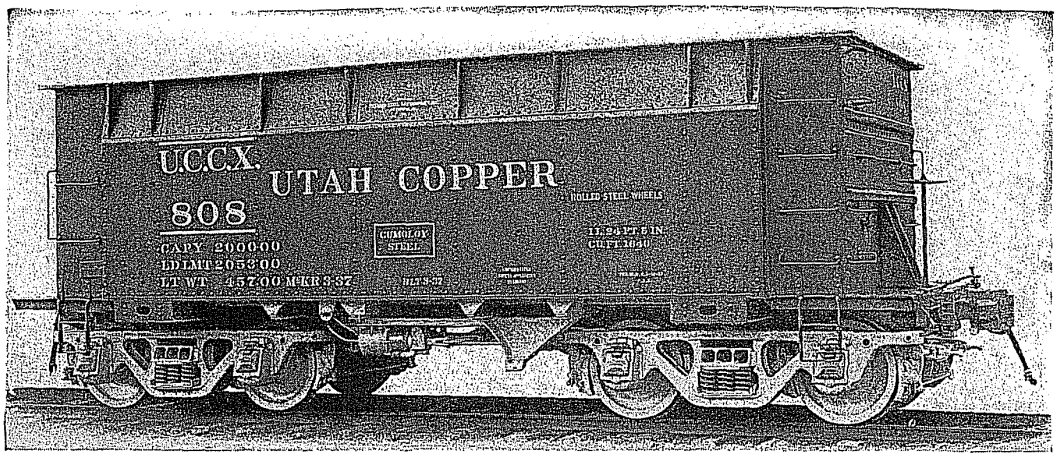


Fig. 2.671—Utah Copper Company 200,000-lb. capacity high-tensile steel ore car. Unloaded by car dumper. Builder, Pressed Steel Car Company, Inc.

Light weight, 45,700 lb.; load limit, 205,300 lb.; capacity, 1,640 cu. ft.; inside, length 24 ft. 5 in.; width 10 ft. 6 in.; height 6 ft. 6¾ in.

Description: Railway Age, October 30, 1937

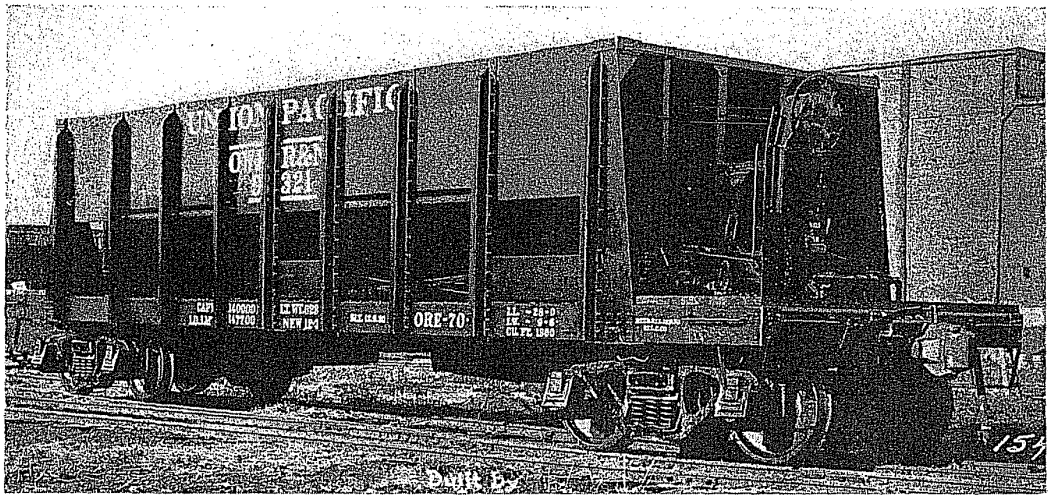


Fig. 2.672—Union Pacific (O.-W. R. & N.) 70-ton ore car, AAR Class HMA. Builder, St. Louis Car Company.

Light weight, 62,300 lb.; load limit, 147,700 lb.; capacity, 1,360 cu. ft.; inside, length 28 ft. 0 in.; inside, width 9 ft. 6 in.

Fig. 2.673—Canadian National 80-ton ore car with four drop bottom doors, each side, AAR Class GS.

Light weight, 48,700 lb.; load limit, 161,300 lb.; capacity, 1,080 cu. ft.; length inside, 22 ft. 11 in.

Enterprise Bulk Commodity, Ore and Ballast Cars

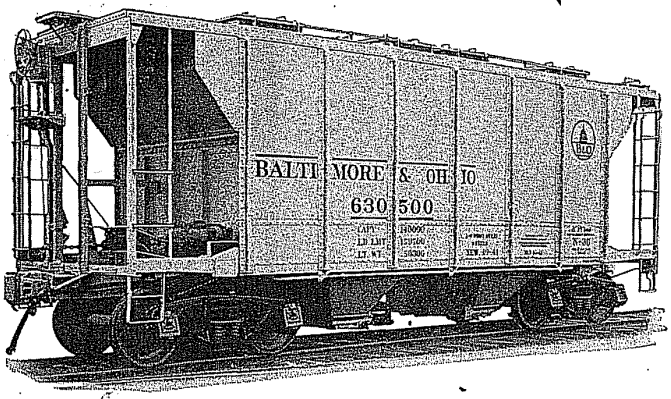


Fig. 2.678—70-ton Bulk Commodity Covered Hopper Car

THE Bulk Commodity Covered Hopper Car has become a standard service car for many commodities formerly hauled in sack, barrel or loosely in box cars.

The Enterprise Outlet Unit illustrated in Fig. 2.679

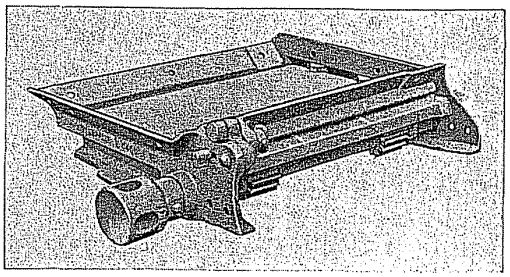


Fig. 2.679—Enterprise Bulk Commodity Outlet

is of cast steel, a finished machined product which provides a close, tight seal against leakage, a large opening and convenient means for operating. For general plan of Enterprise 70-ton car see Fig. 2.677, page 288 and application of outlet see Fig. 3.227, page 475.

The Enterprise has also developed a new seal tight Hatch with Door Lock for use in loading this type of car, which is illustrated and shown applied in Fig. 2.677, page 288, details, Figs. 3.231 and 3.233, page 477.

Enterprise Multi-Service Ballast Cars

The Enterprise Type A Multi-Service Ballast Car illustrated in Fig. 2.680 is of 55 tons capacity and of Standard A.A.R. dimensions, 34 ft. 0 in. overall length and 10 ft. 8 in. height.

The car is designed to release ballast from a moving train to the sides or center of the track, free of the rails and in quantities as desired by the operator. The floors of the car are steep; corner pockets are eliminated and the passageways between the floors and outlet hoppers are wide, providing for a free unrestricted flow of the ballast which is essential to prompt and clean unloading of the car. For general design, see page 275.

There is also an Enterprise Type B Coal-Ballast Car, the 50-60-70-80. This is a standard A.A.R. hopper car (modified in hoppers only) using Enterprise Ballasting Hoppers, doors and door-operating mechanism. This design of car provides for an increased use of standard A.A.R. car parts and with the lower position and lesser slope of the car floors makes available an increase in the capacity for coal. The general dimensions of this car are the same as an A.A.R. 50-ton hopper and the finished weight substantially the same as the Enterprise Type A Multi-Service Ballast Car. This car is suitable for 61 tons of coal or other lading.

By a slight increase in thickness of the Body Bolster and the use of 70-ton trucks, the car would be suitable for 65 tons of coal or 80 tons of ballast and other heavy materials. For general design see page 278.

Fig. 2.680—55-ton Multi-Service Car

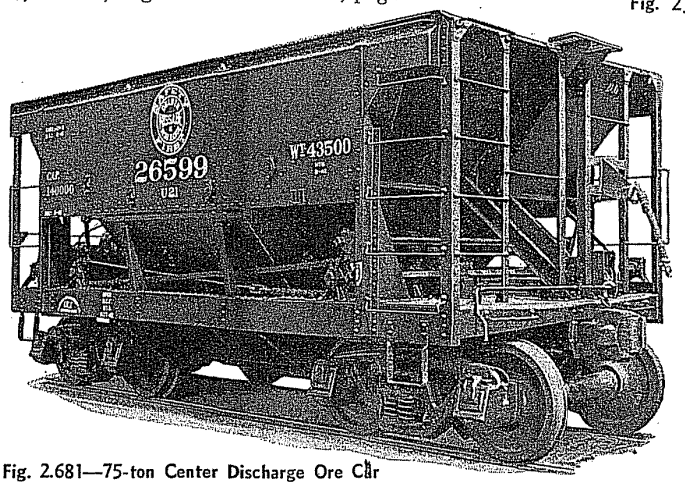


Fig. 2.681—75-ton Center Discharge Ore Car

Enterprise Ore Car—Door Mechanism

The 75-ton Hopper Ore Car shown in Fig. 2.681 illustrates the Center Discharge Car commonly used in the Iron Ore Service. Steep floors, rounded corners and a large door opening are essential to quick and free discharge of the load. The door opening is closed by a pair of longitudinally hinged doors which are controlled by the Enterprise Door Mechanism which is operative from either side of the car and securely locks the doors when in closed position. A general plan of Enterprise 75-ton ore car is illustrated in Fig. 2.669, page 284. A side discharge ore or concentrate car is illustrated in Fig. 3.670, page 285.